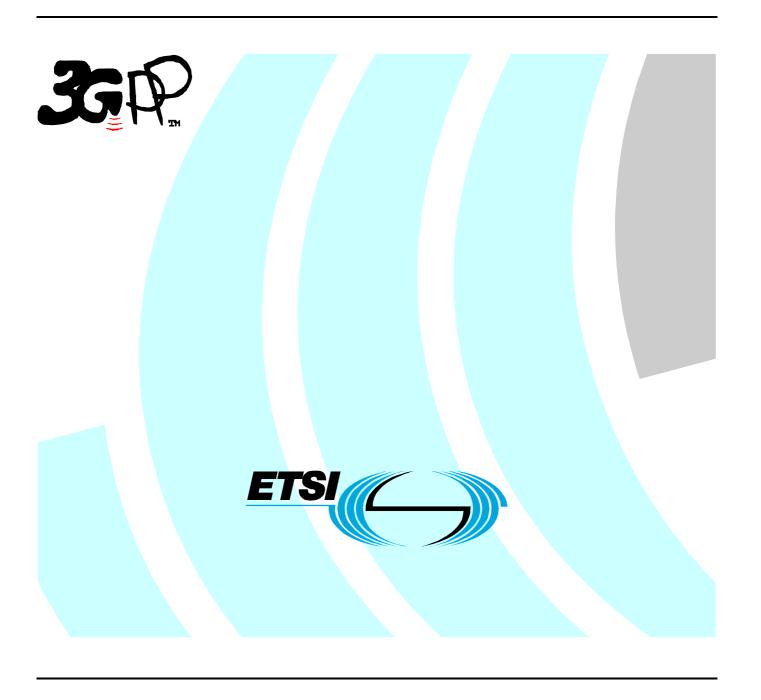
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#### **ETSI**

650 Route des Lucioles F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

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# Contents

Intell	lectual Property Rights	2
Forev	word	2
Forev	word	23
1	Scope	24
2	References	
3	Definitions, Symbols and Abbreviations	
3.1	Definitions	
3.2	Symbols	
3.3	Abbreviations	
4	General	28
4.1	Procedure Specification Principles	
4.2	Forwards and Backwards Compatibility	
4.3	Specification Notations	
5	NBAP Services	30
5.1	Parallel Transactions	
6	Services Expected from Signalling Transport	30
7	Functions of NBAP	30
8	NBAP Procedures	33
8.1	Elementary Procedures	33
8.2	NBAP Common Procedures	35
8.2.1	Common Transport Channel Setup	
8.2.1.		
8.2.1.2	1	
8.2.1.3	1	
8.2.1.4 8.2.2	4 Abnormal Conditions	
8.2.2.		
8.2.2.2		
8.2.2.3	•	
8.2.2.4	•	
8.2.3	Common Transport Channel Deletion	
8.2.3.		
8.2.3.2	1	
8.2.3.3		
8.2.3.4 8.2.4	4 Abnormal Conditions	
8.2.4.		
8.2.4.2		
8.2.4.3	1	
8.2.4.4		
8.2.5	Unblock Resource	47
8.2.5.		
8.2.5.2		
8.2.5.3		
8.2.6 8.2.6.	1	
8.2.6.2		
8.2.6.3	1	
8.2.7	Audit	
8.2.7.		
8.2.7.2	2 Successful Operation	48

8.2.7.3	Unsuccessful Operation	
8.2.7.4	Abnormal Conditions	50
8.2.8	Common Measurement Initiation	51
8.2.8.1	General	51
8.2.8.2	Successful Operation	51
8.2.8.3	Unsuccessful Operation	59
8.2.8.4	Abnormal Conditions	
8.2.9	Common Measurement Reporting	63
8.2.9.1	General	63
8.2.9.2	Successful Operation	63
8.2.9.3	Abnormal Conditions	
8.2.10	Common Measurement Termination	64
8.2.10.1	General	64
8.2.10.2	Successful Operation	64
8.2.10.3	Abnormal Conditions	64
8.2.11	Common Measurement Failure	65
8.2.11.1	General	65
8.2.11.2	Successful Operation	65
8.2.11.3	Abnormal Conditions	65
8.2.12	Cell Setup	65
8.2.12.1	General	65
8.2.12.2	Successful Operation	65
8.2.12.3	Unsuccessful Operation	67
8.2.12.4	Abnormal Conditions	
8.2.13	Cell Reconfiguration	
8.2.13.1	General	68
8.2.13.2	Successful Operation	68
8.2.13.3	Unsuccessful Operation	
8.2.13.4	Abnormal Conditions	
8.2.14	Cell Deletion	71
8.2.14.1	General	
8.2.14.2	Successful Operation	
8.2.14.3	Unsuccessful Operation	
8.2.14.4	Abnormal Conditions	
8.2.15	Resource Status Indication.	
8.2.15.1	General	
8.2.15.2	Successful Operation	
8.2.15.3	Abnormal Conditions	
8.2.16	System Information Update	
8.2.16.1	General	
8.2.16.2	Successful Operation	
8.2.16.3	Unsuccessful Operation	
8.2.16.4	Abnormal Conditions	
8.2.17	Radio Link Setup	
8.2.17.1	General	
8.2.17.2	Successful Operation	
8.2.17.3	Unsuccessful Operation	
8.2.17.4	Abnormal Conditions	
8.2.18	Physical Shared Channel Reconfiguration	
8.2.18.1	General	
8.2.18.2	Successful Operation	
8.2.18.3	Unsuccessful Operation	
8.2.18.4	Abnormal Conditions	
8.2.19	Reset	
8.2.19.2.1	Reset Initiated by the CRNC	
8.2.19.2.2	Reset Initiated by the Node B	
8.2.20	Cell Synchronisation Initiation [TDD]	
8.2.20.1	General Superation	
8.2.20.2	Successful Operation	
8.2.20.3	Unsuccessful Operation	
8.2.20.4	Abnormal Conditions	123

8.2.21.1	General	123
8.2.21.2	Successful Operation	
8.2.21.2.	1	
8.2.21.2.2		
8.2.21.2.3	- · · · · · · · · · · · · · · · · · · ·	
8.2.21.2.4		
8.2.21.2.5		
8.2.21.3	Unsuccessful Operation	
8.2.21.4	Abnormal Conditions	
8.2.22	Cell Synchronisation Reporting [TDD]	
8.2.22.1	General	
8.2.22.1	Successful Operation	
8.2.22.3	Abnormal Conditions	
8.2.23	Cell Synchronisation Termination [TDD]	
8.2.23.1	General	
8.2.23.1	Successful Operation.	
8.2.23.3	Abnormal Conditions	
8.2.24	Cell Synchronisation Failure [TDD]	
8.2.24.1	General	
8.2.24.1	Successful Operation.	
8.2.24.2	Abnormal Conditions	
8.2.25	Cell Synchronisation Adjustment [TDD]	
8.2.25.1	General	
8.2.25.2	Successful Operation	
8.2.25.3	Unsuccessful Operation	
8.2.25.4	Abnormal Conditions	
8.2.26	Information Exchange Initiation	
8.2.26.1	General	
8.2.26.2	Successful Operation	
8.2.26.3	Unsuccessful Operation	
8.2.26.4	Abnormal Conditions	
8.2.27	Information Reporting	
8.2.27.1	General	
8.2.27.1	Successful Operation.	
8.2.27.3	Abnormal Conditions	
8.2.28	Information Exchange Termination	
8.2.28.1	General	
8.2.28.2	Successful Operation.	
8.2.28.3	Abnormal Conditions	
8.2.29	Information Exchange Failure	
8.2.29.1	General	
8.2.29.2	Successful Operation	
8.2.30	MBMS Notification Update	
8.2.30.1	General	
8.2.30.2	Successful Operation	
8.2.30.3	Abnormal Conditions	
8.2.31	UE Status Update [FDD and 1.28Mcps TDD]	
8.2.31.1	General	
8.2.31.2	Successful Operation	
8.2.31.3	Abnormal Conditions	
8.3	NBAP Dedicated Procedures	
8.3.1	Radio Link Addition	
8.3.1.1	General	
8.3.1.2	Successful Operation	
8.3.1.3	Unsuccessful Operation	
8.3.1.4	Abnormal conditions	
8.3.2	Synchronised Radio Link Reconfiguration Preparation	
8.3.2.1	General	
8.3.2.2	Successful Operation	
8323	Unsuccessful Operation	101

8.3.2.4	Abnormal Conditions	192
8.3.3	Synchronised Radio Link Reconfiguration Commit	
8.3.3.1	General	196
8.3.3.2	Successful Operation	197
8.3.3.3	Abnormal Conditions	198
8.3.4	Synchronised Radio Link Reconfiguration Cancellation	198
8.3.4.1	General	198
8.3.4.2	Successful Operation	198
8.3.4.3	Abnormal Conditions	
8.3.5	Unsynchronised Radio Link Reconfiguration	198
8.3.5.1	General	198
8.3.5.2	Successful Operation	199
8.3.5.3	Unsuccessful Operation	223
8.3.5.4	Abnormal Conditions	224
8.3.6	Radio Link Deletion	228
8.3.6.1	General	228
8.3.6.2	Successful Operation	228
8.3.6.3	Unsuccessful Operation	
8.3.6.4	Abnormal Conditions	
8.3.7	Downlink Power Control [FDD]	229
8.3.7.1	General	229
8.3.7.2	Successful Operation	229
8.3.7.3	Abnormal Conditions	
8.3.8	Dedicated Measurement Initiation	230
8.3.8.1	General	230
8.3.8.2	Successful Operation	230
8.3.8.3	Unsuccessful Operation	233
8.3.8.4	Abnormal Conditions	234
8.3.9	Dedicated Measurement Reporting	235
8.3.9.1	General	
8.3.9.2	Successful Operation	
8.3.9.3	Abnormal Conditions	
8.3.10	Dedicated Measurement Termination	
8.3.10.1	General	
8.3.10.2	Successful Operation	
8.3.10.3	Abnormal Conditions	
8.3.11	Dedicated Measurement Failure	
8.3.11.1	General	
8.3.11.2	Successful Operation	
8.3.11.3	Abnormal Conditions	
8.3.12	Radio Link Failure	
8.3.12.1	General	
8.3.12.2	Successful Operation	
8.3.12.3	Abnormal Conditions	
8.3.13	Radio Link Restoration	
8.3.13.1	General	
8.3.13.2	Successful Operation	
8.3.13.3	Abnormal Condition	
8.3.14	Compressed Mode Command [FDD]	
8.3.14.1	General Superstian	
8.3.14.2 8.3.14.3	Successful Operation	
8.3.14.3 8.3.15	Downlink Power Timeslot Control [TDD]	
8.3.15.1	General	
8.3.15.2	Successful Operation	
8.3.15.3	Abnormal Conditions	
8.3.16	Radio Link Pre-emption	
8.3.16.1	General	
8.3.16.2	Successful Operation.	
8.3.16.3	Abnormal Conditions	
8.3.17	Bearer Re-arrangement	
8 3 17 1	General	2/1

8.3.17.2	1	
8.3.17.3	Abnormal Conditions	241
8.3.18	Radio Link Activation	
8.3.18.1		
8.3.18.2	1	
8.3.18.3		
8.3.19	Radio Link Parameter Update	
8.3.19.1		
8.3.19.2	1	
8.3.19.3		
8.4	Error Handling Procedures	
8.4.1	Error Indication	
8.4.1.1	General	
8.4.1.2	Successful Operation	
8.4.1.3	Abnormal Conditions	
	Elements for NBAP communication	
9.1	Message Functional Definition and Contents	
9.1.1	General	
9.1.2	Message Contents	
9.1.2.1	Presence	
9.1.2.2	Criticality	
9.1.2.3	Range	
9.1.2.4	Assigned CriticalityCOMMON TRANSPORT CHANNEL SETUP REQUEST	
9.1.3 9.1.3.1		
9.1.3.1	FDD Message	
9.1.3.2	COMMON TRANSPORT CHANNEL SETUP RESPONSE	
9.1.4	COMMON TRANSPORT CHANNEL SETUP RESPONSECOMMON TRANSPORT CHANNEL SETUP FAILURE	
9.1.5	COMMON TRANSPORT CHANNEL SETUP PAILURE COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST	
9.1.6.1	FDD Message	
9.1.6.2	TDD Message	
9.1.0.2	COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE	
9.1.8	COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE	
9.1.9	COMMON TRANSPORT CHANNEL DELETION REQUEST	
9.1.10	COMMON TRANSPORT CHANNEL DELETION RESPONSE	
9.1.11	BLOCK RESOURCE REQUEST	
9.1.12	BLOCK RESOURCE RESPONSE	
9.1.13	BLOCK RESOURCE FAILURE	
9.1.14	UNBLOCK RESOURCE INDICATION	
9.1.15	AUDIT REQUIRED INDICATION	
9.1.16	AUDIT REQUEST	
9.1.17	AUDIT RESPONSE	
9.1.17A		
9.1.18	COMMON MEASUREMENT INITIATION REQUEST	278
9.1.19	COMMON MEASUREMENT INITIATION RESPONSE	
9.1.20	COMMON MEASUREMENT INITIATION FAILURE	
9.1.21	COMMON MEASUREMENT REPORT	
9.1.22	COMMON MEASUREMENT TERMINATION REQUEST	
9.1.23	COMMON MEASUREMENT FAILURE INDICATION	
9.1.24	CELL SETUP REQUEST	
9.1.24.1		
9.1.24.2		
9.1.25	CELL SETUP RESPONSE	
9.1.26	CELL SETUP FAILURE	
9.1.27	CELL RECONFIGURATION REQUEST	292
9.1.27.1		
9.1.27.2		
9.1.28	CELL RECONFIGURATION RESPONSE	
9.1.29	CELL RECONFIGURATION FAILURE	297
9.1.30	CELL DELETION REQUEST	297
9 1 31	CELL DELETION RESPONSE	297

9.1.32	RESOURCE STATUS INDICATION	
9.1.33	SYSTEM INFORMATION UPDATE REQUEST	307
9.1.34	SYSTEM INFORMATION UPDATE RESPONSE	
9.1.35	SYSTEM INFORMATION UPDATE FAILURE	
9.1.36	RADIO LINK SETUP REQUEST	
9.1.36.1	FDD message	
9.1.36.2	TDD message	
9.1.37	RADIO LINK SETUP RESPONSE	318
9.1.37.1	FDD message	
9.1.37.2	TDD Message	
9.1.38	RADIO LINK SETUP FAILURE	
9.1.38.1	FDD Message	
9.1.38.2	TDD Message	
9.1.39	RADIO LINK ADDITION REQUEST	
9.1.39.1	FDD Message	
9.1.39.2	TDD Message	327
9.1.40	RADIO LINK ADDITION RESPONSE	331
9.1.40.1	FDD message	331
9.1.40.2	TDD Message	
9.1.41	RADIO LINK ADDITION FAILURE	335
9.1.41.1	FDD Message	335
9.1.41.2	TDD Message	
9.1.42	RADIO LINK RECONFIGURATION PREPARE	
9.1.42.1	FDD Message	
9.1.42.2	TDD Message	341
9.1.43	RADIO LINK RECONFIGURATION READY	351
9.1.44	RADIO LINK RECONFIGURATION FAILURE	
9.1.45	RADIO LINK RECONFIGURATION COMMIT	353
9.1.46	RADIO LINK RECONFIGURATION CANCEL	
9.1.47	RADIO LINK RECONFIGURATION REQUEST	354
9.1.47.1	FDD Message	354
9.1.47.2	TDD Message	
9.1.48	RADIO LINK RECONFIGURATION RESPONSE	
9.1.49	RADIO LINK DELETION REQUEST	
9.1.50	RADIO LINK DELETION RESPONSE	
9.1.51	DL POWER CONTROL REQUEST [FDD]	363
9.1.52	DEDICATED MEASUREMENT INITIATION REQUEST	
9.1.53	DEDICATED MEASUREMENT INITIATION RESPONSE	
9.1.54	DEDICATED MEASUREMENT INITIATION FAILURE	
9.1.55	DEDICATED MEASUREMENT REPORT	
9.1.56	DEDICATED MEASUREMENT TERMINATION REQUEST	
9.1.57	DEDICATED MEASUREMENT FAILURE INDICATION	
9.1.58	RADIO LINK FAILURE INDICATION	
9.1.59	RADIO LINK RESTORE INDICATION	
9.1.60	COMPRESSED MODE COMMAND [FDD]	
9.1.61	ERROR INDICATION	
9.1.62	PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST	
9.1.62.1	FDD Message	374
9.1.62.2	TDD Message	
9.1.63	PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE	
9.1.64	PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE	
9.1.65	RESET REQUEST	
9.1.66	RESET RESPONSE	
9.1.67	DL POWER TIMESLOT CONTROL REQUEST [TDD]	
9.1.68	RADIO LINK PREEMPTION REQUIRED INDICATION	
9.1.69	INFORMATION EXCHANGE INITIATION REQUEST	
9.1.70	INFORMATION EXCHANGE INITIATION RESPONSE	
9.1.71	INFORMATION EXCHANGE INITIATION FAILURE	
9.1.72	INFORMATION REPORT	
9.1.73	INFORMATION EXCHANGE TERMINATION REQUEST	
9.1.74	INFORMATION EXCHANGE FAILURE INDICATION	
9.1.75	CELL SYNCHRONISATION INITIATION REQUEST [TDD]	401

9.1.76	CELL SYNCHRONISATION INITIATION RESPONSE [TDD]	402
9.1.77	CELL SYNCHRONISATION INITIATION FAILURE [TDD]	
9.1.78	CELL SYNCHRONISATION RECONFIGURATION REQUEST [TDD]	403
9.1.79	CELL SYNCHRONISATION RECONFIGURATION RESPONSE [TDD]	
9.1.80	CELL SYNCHRONISATION RECONFIGURATION FAILURE [TDD]	405
9.1.81	CELL SYNCHRONISATION REPORT [TDD]	405
9.1.82	CELL SYNCHRONISATION TERMINATION REQUEST [TDD]	406
9.1.83	CELL SYNCHRONISATION FAILURE INDICATION [TDD]	407
9.1.84	CELL SYNCHRONISATION ADJUSTMENT REQUEST [TDD]	407
9.1.85	CELL SYNCHRONISATION ADJUSTMENT RESPONSE [TDD]	407
9.1.86	CELL SYNCHRONISATION ADJUSTMENT FAILURE [TDD]	408
9.1.87	BEARER REARRANGEMENT INDICATION	408
9.1.88	RADIO LINK ACTIVATION COMMAND	409
9.1.88.1	FDD Message	409
9.1.88.2	TDD Message	409
9.1.89	RADIO LINK PARAMETER UPDATE INDICATION	410
9.1.89.1	FDD Message	410
9.1.89.2	TDD Message	
9.1.90	MBMS NOTIFICATION UPDATE COMMAND	411
9.1.91	UE STATUS UPDATE COMMAND	
9.2	Information Element Functional Definition and Contents	411
9.2.0	General	411
9.2.1	Common parameters	
9.2.1.1	Add/Delete Indicator	
9.2.1.1A	Allocation/Retention Priority	
9.2.1.1B	Alternative Format Reporting Indicator	412
9.2.1.2	Availability Status	
9.2.1.3	BCCH Modification Time	
9.2.1.4	Binding ID	413
9.2.1.4A	BLER	
9.2.1.5	Blocking Priority Indicator	
9.2.1.5A	Burst Mode Parameters	
9.2.1.5B	Broadcast Common Transport Bearer Indication	
9.2.1.5C	Broadcast Reference	
9.2.1.6	Cause	
9.2.1.7	CFN	
9.2.1.8	CFN Offset	
9.2.1.9	C-ID	
9.2.1.9A	Common Channels Capacity Consumption Law	
9.2.1.9B	Common Measurement Accuracy	
9.2.1.10	Common Measurement Object Type	
9.2.1.11	Common Measurement Type	
9.2.1.12	Common Measurement Value	
9.2.1.12A		
9.2.1.13	Common Physical Channel ID	
9.2.1.13A	•	
9.2.1.14	Common Transport Channel ID	
9.2.1.14A	1	
9.2.1.14B	1	
9.2.1.15	Communication Control Port ID	
9.2.1.16	Configuration Generation ID	
9.2.1.17	Criticality Diagnostics.	
9.2.1.18	CRNC Communication Context ID	
9.2.1.18A	CTFC DCH Combination Indicator	
9.2.1.19 9.2.1.20		
	DCH ID	
9.2.1.20A 9.2.1.20B	1 7 1	
9.2.1.20B 9.2.1.20C	1 •	
9.2.1.20C 9.2.1.21	DCH Information Response	
9.2.1.21	Dedicated Measurement Object Type	
9.2.1.22	Dedicated Measurement Type  Dedicated Measurement Type	432 //32

9.2.1.24	Dedicated Measurement Value	
9.2.1.24A	Dedicated Measurement Value Information	
9.2.1.24B	DGPS Corrections	
9.2.1.24C	Delayed Activation	
9.2.1.24D	Delayed Activation Update	437
9.2.1.24E	Discard Timer	
9.2.1.25	Diversity Control Field	
9.2.1.26	Diversity Indication	
9.2.1.26A	DL DPCH Timing Adjustment	
9.2.1.27	DSCH ID	
9.2.1.27A	DSCH Information Response	
9.2.1.28	DSCH Transport Format Set	
9.2.1.29	DSCH Transport Format Combination Set	
9.2.1.29A	End Of Audit Sequence Indicator	
9.2.1.29B	FN Reporting Indicator	
9.2.1.30	Frame Handling Priority	
9.2.1.31	Frame Offset	
9.2.1.31A	IB_OC_ID	
9.2.1.31B	GPS Navigation Model & Time Recovery	
9.2.1.31C	GPS Ionospheric Model	
9.2.1.31D	GPS UTC Model	
9.2.1.31E	GPS Real-Time Integrity	
9.2.1.31F	GPS Almanac	
9.2.1.31G	GPS Receiver Geographical Position (GPS RX Pos)	
9.2.1.31Ga	HSDPA Capability	
9.2.1.31H	HS-DSCH Information To Modify	
9.2.1.31HA	HS-DSCH Information To Modify Unsynchronised	
9.2.1.31Ha	HS-DSCH Initial Capacity Allocation	
9.2.1.31Hb		
9.2.1.31I 9.2.1.31IA	HS-DSCH MAC-d Flow IDHS-DSCH MAC-d Flows Information	
	HS-DSCH MAC-d Flows Information	
9.2.1.31IB 9.2.1.31IC	HS-DSCH MAC-d PDU Size Capability	
9.2.1.31ID	HS-DSCH MAC-d PDU Size Capability  HS-DSCH MAC-d PDU Size Format	
9.2.1.31Ia	HS-DSCH Physical Layer Category	
9.2.1.31Iaa	HS-DSCH Provided Bit Rate Value	
9.2.1.31Ib	HS-DSCH Provided Bit Rate Value Information	
9.2.1.31Iba	HS-DSCH Required Power Value	
9.2.1.31Ic	HS-DSCH Required Power Value Information	
9.2.1.31J	HS-DSCH RNTI	
9.2.1.31K	HS-SCCH Code Change Indicator	
9.2.1.31L	HS-SCCH Code Change Grant	
9.2.1.31M	HS-PDSCH Code Change Indicator [FDD]	
9.2.1.31N	HS-PDSCH Code Change Grant [FDD]	
9.2.1.32	IB_SG_DATA	
9.2.1.33	IB_SG_POS	
9.2.1.34	IB_SG_REP	
9.2.1.35	IB Type	
9.2.1.36	Indication Type	
9.2.1.36A	Information Exchange Object Type	
9.2.1.36B	Information Report Characteristics	455
9.2.1.36C	Information Exchange ID	456
9.2.1.36D	Information Type	
9.2.1.36E	Information Threshold	459
9.2.1.36F	IPDL Indicator	459
9.2.1.37	Limited Power Increase	459
9.2.1.37A	Local Cell Group ID	459
9.2.1.38	Local Cell ID.	
9.2.1.38A	MAC-d PDU Size	460
9.2.1.38Aa	MAC-hs Guaranteed Bit Rate	
9.2.1.38Ab	MAC-hs Reordering Buffer Size for RLC-UM	
9.2.1.38Ac	MAC-hs Reset Indicator	460

9.2.1.38B	MAC-hs Window Size	
9.2.1.38C	MAC PDU Size Extended	
9.2.1.39	Maximum DL Power Capability	
9.2.1.40	Maximum Transmission Power	
9.2.1.40A	Measurement Availability Indicator	
9.2.1.40B	Measurement Change Time	
9.2.1.41	Measurement Filter Coefficient	
9.2.1.41A	Measurement Hysteresis Time	
9.2.1.42	Measurement ID	
9.2.1.43	Measurement Increase/Decrease Threshold	
9.2.1.43A	Measurement Recovery Behavior	
9.2.1.43B	Measurement Recovery Reporting Indicator.	
9.2.1.43C 9.2.1.44	Measurement Throshold	
9.2.1.44	Measurement Threshold	
9.2.1.45 9.2.1.45A	Message Structure	
9.2.1.43A 9.2.1.46	Message Type	
9.2.1.46 9.2.1.46a	MICH CFN	
9.2.1.46A	Minimum DL Power Capability	
9.2.1.40A 9.2.1.47	Minimum Spreading Factor	
9.2.1.47 9.2.1.47a	Modification Period	
9.2.1.47A	N_INSYNC_IND	
9.2.1.47B	N_OUTSYNC_IND	
9.2.1.47D	Neighbouring FDD Cell Measurement Information	
9.2.1.47D	Neighbouring TDD Cell Measurement Information	
9.2.1.47E	Neighbouring TDD Cell Measurement Information LCR	
9.2.1.47E	NI	
9.2.1.48	Node B Communication Context ID.	
9.2.1.49	Payload CRC Presence Indicator	
9.2.1.49A	PICH Power	
9.2.1.49B	Power Local Cell Group ID	
9.2.1.49C	Priority Queue ID	
9.2.1.49D	Process Memory Size	
9.2.1.50	Puncture Limit.	
9.2.1.50A	QE-Selector	
9.2.1.51	Report Characteristics	
9.2.1.51a	Report Periodicity	
9.2.1.51A	Requested Data Value	
9.2.1.51B	Requested Data Value Information	
9.2.1.52	Resource Operational State	
9.2.1.52A	Retention Priority	
9.2.1.52B	RLC Mode	479
9.2.1.53	RL ID	479
9.2.1.53a	RNC-Id	479
9.2.1.53b	RTWP* Reporting Indicator	480
9.2.1.53c	RTWP* for Cell Portion Reporting Indicator	480
9.2.1.53A	SFN	480
9.2.1.53B	Segment Type	480
9.2.1.53C	SFN-SFN Measurement Threshold Information	480
9.2.1.53D	SFN-SFN Measurement Time Stamp	
9.2.1.53E	SFN-SFN Measurement Value Information	481
9.2.1.53F	SFN-SFN Value	
9.2.1.53G	RL Specific DCH Information	
9.2.1.53H	Scheduling Priority Indicator	
9.2.1.53I	SID	
9.2.1.54	SIB Deletion Indicator	
9.2.1.55	SIB Originator	
9.2.1.55A	Signalling Bearer Request Indicator	
9.2.1.56	Shutdown Timer	
9.2.1.56a	T1	
9.2.1.56A	T_RLFAILURE	
9.2.1.56B	Start Of Audit Sequence Indicator	484

9.2.1.56C	TFCI2 Bearer Request Indicator	485
9.2.1.57	TFCI Presence	
9.2.1.58	TFCS (Transport Format Combination Set)	485
9.2.1.58A	TNL QoS	486
9.2.1.59	Transport Format Set	
9.2.1.60	ToAWE	488
9.2.1.61	ToAWS	488
9.2.1.62	Transaction ID	488
9.2.1.62A	Transport Bearer Request Indicator	489
9.2.1.63	Transport Layer Address	489
9.2.1.64	TSTD Indicator	
9.2.1.64A	T <sub>UTRAN-GPS</sub> Measurement Value Information	489
9.2.1.64B	T <sub>UTRAN-GPS</sub> Measurement Threshold Information	490
9.2.1.64C	T <sub>UTRAN-GPS</sub> Accuracy Class	490
9.2.1.65	UARFCN	491
9.2.1.65A	UL Capacity Credit	491
9.2.1.65B	UTRAN Cell Identifier (UC-Id)	491
9.2.1.65C	Extended RNC-ID	491
9.2.1.66	UL FP Mode	491
9.2.1.67	UL interference level	492
9.2.1.67A	UL SIR	492
9.2.1.68	Unidirectional DCH Indicator	492
9.2.1.69	E-DCH MAC-d Flow Multiplexing List	492
9.2.1.70	E-DCH Capability	493
9.2.1.71	E-DCH Logical Channel Information	493
9.2.1.72	E-DCH Logical Channel To Modify	494
9.2.1.73	E-DCH MAC-d Flows To Delete	495
9.2.1.74	E-DCH MAC-d Flow ID	496
9.2.1.74A	E-DCH MAC-d PDU Size Capability	496
9.2.1.74B	E-DCH MAC-d PDU Size Format	496
9.2.1.75	E-RNTI	496
9.2.1.76	E-DCH DDI Value	
9.2.1.77	E-DCH Provided Bit Rate Value	497
9.2.1.78	E-DCH Provided Bit Rate Value Information	
9.2.1.79	E-DCH Processing Overload Level	
9.2.1.80	Logical channel ID	
9.2.1.81	Maximum Number Of Retransmissions For E-DCH	
9.2.1.82	MAC-es Guaranteed Bit Rate	
9.2.1.83	MAC-e Reset Indicator	
9.2.1.84	Scheduling Information	
9.2.1.85	E-DCH Power Offset for Scheduling Info	
9.2.1.86	MBMS Capability	
9.2.1.87	Modulation	
9.2.1.88	DGANSS Corrections	
9.2.1.89	GANSS Almanac	
9.2.1.90	GANSS Clock Model	
9.2.1.90a	GANSS Additional Clock Models	
9.2.1.91	GANSS Ionospheric Model	
9.2.1.91a	GANSS Additional Ionospheric Model	
9.2.1.92	GANSS Navigation Model	
9.2.1.93	GANSS Orbit Model	
9.2.1.93a	GANSS Additional Orbit Models	
9.2.1.94	GANSS Real Time Integrity	
9.2.1.95	GANSS Receiver Geographical Position (GANSS RX Pos)	
9.2.1.96	GANSS Time Model	
9.2.1.96a	GANSS Additional Time Models	
9.2.1.97	GANSS UTC Model	
9.2.1.97a	GANSS Additional UTC Models	
9.2.1.98	T <sub>UTRAN-GANSS</sub> Accuracy Class	
9.2.1.99	T <sub>UTRAN-GANSS</sub> Measurement Threshold Information	
9.2.1.100	T <sub>UTRAN-GANSS</sub> Measurement Value Information	510 518

9.2.1.102	HARQ Memory Partitioning	519
9.2.1.103	GANSS Data Bit Assistance	
9.2.1.104	GANSS ID	520
9.2.1.104a	GANSS Time ID	520
9.2.1.105	GANSS Navigation Model And Time Recovery	520
9.2.1.105a	GANSS Additional Navigation Models And Time Recovery	521
9.2.1.106	GANSS Signal ID	522
9.2.1.107a	GANSS Earth Orientation Parameters	522
9.2.1.107b	SBAS ID	523
9.2.1.107c	GANSS Auxiliary Information	523
9.2.1.107d	Additional Ionospheric Model Request	523
9.2.1.107e	Earth Orientation Parameters Request	523
9.2.1.107f	GANSS Additional Navigation Models And Time Recovery Request	524
9.2.1.107g	GANSS Additional UTC Models Request	524
9.2.1.107h	GANSS Auxiliary Information Request	524
9.2.1.108	IP Multicast Indication	
9.2.1.109	IP Multicast Data Bearer Indication	524
9.2.1.110	SixtyfourQAM DL Capability	524
9.2.1.111	FACH Measurement Occasion Cycle Length Coefficient	525
9.2.1.112	MAC-ehs Reset Timer	525
9.2.1.113	Paging MAC Flow ID	525
9.2.1.114	Enhanced FACH Capability	525
9.2.1.115	Enhanced PCH Capability	525
9.2.1.116	Enhanced UE DRX Capability	
9.2.1.117	Priority Queue Information for Enhanced FACH/PCH	526
9.2.1.118	MIMO Capability	526
9.2.1.119	MIMO Activation Indicator	526
9.2.1.120	MIMO Mode Indicator	527
9.2.1.121	SixtyfourQAM DL and MIMO Combined Capability	
9.2.1.122	DL RLC PDU Size Format	
9.2.2	FDD specific parameters	
9.2.2.a	ACK-NACK Repetition Factor	
9.2.2.b	ACK Power Offset	
9.2.2.A	Active Pattern Sequence Information	
9.2.2.B	Adjustment Period	
9.2.2.C	Adjustment Ratio	
9.2.2.D	AICH Power	
9.2.2.1	AICH Transmission Timing	
9.2.2.1A	AP Preamble Signature	
9.2.2.1B	AP Sub Channel Number	
9.2.2.1Ba	Best Cell Portions	
9.2.2.1Bb	Bundling Mode Indicator	
9.2.2.1C	CD Sub Channel Numbers	
9.2.2.1Ca	Cell Portion ID	
9.2.2.1D	Channel Assignment Indication	
9.2.2.2 9.2.2.2A	Chip Offset	
	Closed Loop Timing Adjustment Mode	
9.2.2.3 9.2.2.3A	Common Channels Capacity Consumption Law	
9.2.2.3A 9.2.2.4	Compressed Mode Deactivation Flag  Compressed Mode Method	
9.2.2.4 9.2.2.4A	CPCH Allowed Total Rate	
9.2.2.4A 9.2.2.4B	CPCH Allowed Total Rate  CPCH Scrambling Code Number	
9.2.2.4 <b>B</b> 9.2.2.4 <b>C</b>	CPCH UL DPCCH Slot Format	
9.2.2.4C 9.2.2.4Ca	CQI Power Offset	
9.2.2.4Ca 9.2.2.4Cb	CQI Repetition Factor	
9.2.2.4Cb 9.2.2.4D	DCH FDD Information	
9.2.2.4E	DCHs FDD To Modify	
9.2.2.4E 9.2.2.4F	DCH Indicator For E-DCH-HSDPA Operation	
9.2.2.4G	Transport Bearer Not Requested Indicator	
9.2.2.4H	Transport Bearer Not Setup Indicator	
9.2.2.5	D-Field Length	
9226	Dedicated Channels Canacity Consumption Law	533

9.2.2.7	Diversity Control Field	533
9.2.2.8	Diversity Indication	533
9.2.2.9	Diversity Mode	533
9.2.2.10	DL DPCH Slot Format	533
9.2.2.10A	DL DPCH Timing Adjustment	
9.2.2.11	DL frame type	
9.2.2.12	DL or Global Capacity Credit	
9.2.2.12A	DL_power_averaging_window_size	
9.2.2.12B	DL Power Balancing Information	
9.2.2.12C	DL Power Balancing Activation Indicator	
9.2.2.12D	DL Power Balancing Updated Indicator	
9.2.2.13	DL Scrambling Code	
9.2.2.13A	DL TPC Pattern 01 Count	
9.2.2.13B	DSCH FDD Information	
9.2.2.13C	DPC Mode.	
9.2.2.13D	DSCH FDD Common Information	
9.2.2.13Da	E-DCH FDD Information	
9.2.2.13DA	E-DCH FDD Update Information	
9.2.2.13Db	E-DCH FDD Information Response	
9.2.2.13Dc	E-DCH FDD DL Control Channel Information	
9.2.2.13De	E-DCH RL Indication	
9.2.2.13Df	E-DCH FDD Information to Modify	
9.2.2.13Dh	E-DCH Transport Format Combination Set Information (E-TFCS Information)	
9.2.2.13Dii 9.2.2.13Dii	E-TTI	
9.2.2.13Dj	E-DPCCH Power Offset	
9.2.2.13DJ 9.2.2.13Dk	E-DCH HARQ Power Offset FDD	
9.2.2.13Dk 9.2.2.13Dl	E-DCH MAC-d Flow Multiplexing List	
9.2.2.13Di 9.2.2.13Dm	Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	
9.2.2.13Dm	HARQ Process Allocation For 2ms TTI	
	Reference E-TFCI Power Offset	
9.2.2.13Dp	Extended Reference E-TFCI Power Offset	
9.2.2.13Dq	Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	
9.2.2.13Dr	Enhanced DSCH PC	
9.2.2.13E 9.2.2.13F		
	Enhanced DSCH PC Counter	
9.2.2.13G	Enhanced DSCH PC Indicator  Enhanced DSCH PC Wnd	
9.2.2.13H		
9.2.2.13I	Enhanced DSCH Power Offset	
9.2.2.13Ia	E- RGCH/E-HICH Code Information	
9.2.2.13Ib	E- AGCH Code Information	
9.2.2.13Ic	E-RGCH Release Indicator	
9.2.2.13Id	E-AGCH Power Offset	
9.2.2.13Ie	E-RGCH Power Offset	
9.2.2.13If	E-HICH Power Offset	
9.2.2.13Ig	E-RGCH 2-Index-Step Threshold	
9.2.2.13Ih	E-RGCH 3-Index-Step Threshold	
9.2.2.13J	E-DCH Capability	
9.2.2.13Ja	E-DCH Capacity Consumption Law	
9.2.2.13K	E-DCH Logical Channel Information	
9.2.2.13L	E-DCH Logical Channel To Modify	
9.2.2.13M	E-DCH MAC-d Flows Information	
9.2.2.13N	E-DCH MAC-d Flows To Delete	
9.2.2.130	E-DCH MAC-d Flow ID	
9.2.2.13P	E-RNTI	
9.2.2.13Q	E-DCH DDI Value	
9.2.2.13R	E-DCH Provided Bit Rate Value	
9.2.2.13S	E-DCH Provided Bit Rate Value Information	
9.2.2.13T	E-DCH Maximum Bitrate	
9.2.2.13U	E-DCH Processing Overload Level	
9.2.2.13V	E-DCH TTI Capability	
9.2.2.13W	E-DCH SF Capability	
9.2.2.13X	E-DCH HARQ Combining Capability	
9 2 2 13V	F-DCH Reference Power Offset	551

9.2.2.13Z	E-DCH Power Offset for Scheduling Info	
9.2.2.14	FDD DL Channelisation Code Number	551
9.2.2.14A	FDD DL Code Information	552
9.2.2.14B	FDD S-CCPCH Frame Offset	552
9.2.2.15	FDD SCCPCH Offset	552
9.2.2.16	FDD TPC DL Step Size	552
9.2.2.16a	F-DPCH Capability	553
9.2.2.16A	First RLS Indicator	553
9.2.2.17	Gap Period.	
9.2.2.18	Gap Position Mode	
9.2.2.18a	HARQ Preamble Mode	
9.2.2.18b	HARQ Preamble Mode Activation Indicator	
9.2.2.18ba	HARQ Info for E-DCH	
9.2.2.18c	Logical channel ID	
9.2.2.18A	Limited Power Increase.	
9.2.2.18B	Inner Loop DL PC Status	
9.2.2.18C	IPDL FDD Parameters	
9.2.2.18Ca	HS-DSCH configured indicator	
9.2.2.18D	HS-DSCH FDD Information	
9.2.2.18Da	HS-DSCH FDD Information	
9.2.2.18E	HS-DSCH FDD Secondary Serving Information	
9.2.2.18EA	HS-DSCH FDD Secondary Serving Information Response	
9.2.2.18EB	HS-DSCH FDD Secondary Serving Information To Modify	
9.2.2.18EC	HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised	
9.2.2.18Ea	HS-DSCH FDD Update Information	
9.2.2.18Eaa	HS-DSCH FDD Secondary Serving Update Information	
9.2.2.18Eb	HS-DSCH Serving Cell Change Information	
9.2.2.18Ec	HS-DSCH Serving Cell Change Information Response	
9.2.2.18Eca	HS-DSCH Secondary Serving Cell Change Information Response	
9.2.2.18Ed	E-DCH Serving Cell Change Information Response	
9.2.2.18Ee	HS-DSCH TB Size Table Indicator	
9.2.2.18F	HS-PDSCH FDD Code Information	
9.2.2.18G	HS-SCCH FDD Code Information	561
9.2.2.18H	HS-SCCH ID	562
9.2.2.18I	HS-SCCH Power Offset	562
9.2.2.18K	Initial DL DPCH Timing Adjustment Allowed	562
9.2.2.19	Max Adjustment Period	562
9.2.2.20	Max Adjustment Step	562
9.2.2.20A	Max Number Of PCPCHs	
9.2.2.20B	Max Number Of UL E-DPDCHs	
9.2.2.20C	Maximum Set of E-DPDCHs	
9.2.2.20D	Maximum Number Of Retransmissions For E-DCH	
9.2.2.20E	MAC-es Guaranteed Bit Rate	
9.2.2.20E	MAC-e Reset Indicator	
9.2.2.21	Maximum Number Of UL DPDCHs	
9.2.2.21a	Maximum Target Received Total Wide Band Power	
9.2.2.21a 9.2.2.21b	Target Non-serving E-DCH to Total E-DCH Power Ratio	
9.2.2.210 9.2.2.21A	Maximum PDSCH Power	
9.2.2.21B	CQI Feedback Cycle k	
9.2.2.21C	Measurement Power Offset	
9.2.2.21D	MICH Mode	
9.2.2.22	Minimum UL Channelisation Code Length	
9.2.2.22a	Min UL Channelisation Code Length For E-DCH FDD	
9.2.2.23	Multiplexing Position	
9.2.2.23a	NACK Power Offset	
9.2.2.23A	N_EOT	
9.2.2.23B	NF_max	
9.2.2.23C	N_Start_Message	
9.2.2.23D	Number Of Reported Cell Portions	
9.2.2.24	Pattern Duration (PD)	
9.2.2.24A	PCP Length	565
9.2.2.25	PDSCH Code Mapping	565

9.2.2.26	PICH Mode	566
9.2.2.27	Power Adjustment Type	566
9.2.2.28	Power Control Mode	566
9.2.2.29	Power Offset	566
9.2.2.29A	Power Raise Limit	
9.2.2.30	Power Resume Mode	566
9.2.2.31	Preamble Signature	
9.2.2.32	Preamble Threshold	
9.2.2.33	Primary CPICH Power	
9.2.2.33A	Primary CPICH Usage For Channel Estimation	
9.2.2.34	Primary Scrambling Code	
9.2.2.35	Propagation Delay	
9.2.2.35A	Extended Propagation Delay	
9.2.2.36	QE-Selector	
9.2.2.36A	Oth Parameter	
9.2.2.37	RACH Slot Format	
9.2.2.38	RACH Sub Channel Numbers	
9.2.2.39	RL Set ID	
9.2.2.39a	RL Specific E-DCH Information	
9.2.2.39A	Received Total Wide Band Power	
9.2.2.39B	Reference Received Total Wide Band Power	
9.2.2.39C	Reference Received Total Wide Band Power Reporting	
9.2.2.39D	Reference Received Total Wide Band Power Support Indicator	
9.2.2.40	S-Field Length	
9.2.2.40A	Scheduling Information.	
9.2.2.41	Scrambling Code Change	
9.2.2.42	Scrambling Code Number	
9.2.2.43	Secondary CCPCH Slot Format	
9.2.2.43A	Secondary CPICH Information Change	
9.2.2.43A 9.2.2.44	SSDT Cell Identity	
9.2.2.44A	SSDT Cell Identity  SSDT Cell Identity For EDSCHPC	
9.2.2.45	SSDT Cell ID Length	
9.2.2.46	SSDT Support Indicator	
9.2.2.40	SSDT Support fidicator  SSDT Indication	
9.2.2.47	STTD Indicator	
9.2.2.48A	Synchronisation Indicator	
9.2.2.48B	Serving E-DCH RL	
9.2.2.46B 9.2.2.49	T Cell	
9.2.2.49 9.2.2.49A	TFC12 Bearer Information Response	
9.2.2.49A 9.2.2.50	TFC12 Bearer Information Response	
9.2.2.50		
	TGD	
9.2.2.52 9.2.2.53	TGL	
	Transmit Diversity Indicator	
9.2.2.53A	Transmission Gap Pattern Sequence Information	
9.2.2.53B	Transmission Gap Pattern Sequence Code Information	
9.2.2.54	UL/DL compressed mode selection	
9.2.2.55	UL delta SIR	
9.2.2.56	UL delta SIR after	
9.2.2.57	UL DPCCH Slot Format	
9.2.2.58	UL SIR	
9.2.2.59	UL Scrambling Code	
9.2.2.60	UL Capacity Credit	
9.2.2.61	UL DPDCH Indicator For E-DCH Operation	
9.2.2.62	Fast Reconfiguration Mode	
9.2.2.63	Fast Reconfiguration Permission	
9.2.2.64	Continuous Packet Connectivity DTX-DRX Capability	
9.2.2.65	Continuous Packet Connectivity HS-SCCH less Capability	
9.2.2.66	Continuous Packet Connectivity DTX-DRX Information	
9.2.2.67	Continuous Packet Connectivity DTX-DRX Information To Modify	
9.2.2.68	Continuous Packet Connectivity HS-SCCH less Information	
9.2.2.69 9.2.2.69 A	Continuous Packet Connectivity HS-SCCH less Information Response	580 580
9//644	LODUNIOUS PACKELL ONNECTIVITY HN-NUT H less Deactivate Indicator	520

9.2.2.70	MIMO Capability	580
9.2.2.71	MIMO Activation Indicator	580
9.2.2.72	MIMO Mode Indicator	580
9.2.2.73	MIMO Pilot Configuration	581
9.2.2.74	SixtyfourQAM DL Capability	
9.2.2.74A	Sixtyfour QAM Usage Allowed Indicator	
9.2.2.74B	SixtyfourQAM DL Usage Indicator	
9.2.2.75	HS-DSCH Common System Information	
9.2.2.76	HS-DSCH Paging System Information	
9.2.2.77	HS-DSCH Common System Information Response	
9.2.2.78	HS-DSCH Paging System Information Response	
9.2.2.79	Common MAC Flow ID	
9.2.2.80	Paging MAC Flow ID	
9.2.2.81	HSDPA Associated PICH Information	
9.2.2.82	FACH Measurement Occasion Cycle Length Coefficient	
9.2.2.83	Priority Queue Information for Enhanced FACH/PCH	
9.2.2.84	RACH Measurement Result	
9.2.2.85	BCCH Specific HS-DSCH RNTI Information	
9.2.2.86	Enhanced FACH Capability	
9.2.2.87	Enhanced PCH Capability	
9.2.2.88	SixteenQAM UL Capability	
9.2.2.88A	SixteenQAM UL Operation Indicator	
9.2.2.88B	E-TFCI Boost Information	
9.2.2.89	SixteenQAM UL Information	
9.2.2.90	SixteenQAM UL Information To Modify	
9.2.2.90	Modulation Power Offset	
9.2.2.91	Extended Secondary CCPCH Slot Format	
9.2.2.92	F-DPCH Slot Format	
9.2.2.94 9.2.2.95	F-DPCH Slot Format Capability	
	· · · · · · · · · · · · · · · · · · ·	
9.2.2.96	MIMO N/M Ratio	
9.2.2.97	Common MAC Flows To Delete	
9.2.2.98 9.2.2.99	Paging MAC Flows To Delete	
	MAC-ehs Reset Timer	
9.2.2.100	E-AGCH Table Choice	
9.2.2.101	Common E-DCH Capability	
9.2.2.102	E-AI Capability	
9.2.2.103	Common E-DCH System Information	
9.2.2.104	Common E-DCH System Information Response	
9.2.2.105	Common E-DCH MAC-d Flow Specific Information	
9.2.2.106	Maximum TB Size	
9.2.2.107	Enhanced UE DRX Capability	
9.2.2.108	Enhanced UE DRX Information	
9.2.2.109	E-DPCCH Power Boosting Capability	
9.2.2.110	SixtyfourQAM DL and MIMO Combined Capability	
9.2.2.111	HS-DSCH Preconfiguration Info	
9.2.2.112	HS-DSCH Preconfiguration Setup	
9.2.2.113	Multi Cell Capability Info	
9.2.2.114	Minimum Reduced E-DPDCH Gain Factor	
9.2.2.115	IMB Parameters	
9.2.2.116	Common E-DCH HS-DPCCH Capability	
9.2.2.117	UE Support Indicator Extension	
9.2.2.118	MIMO Power Offset For S-CPICH Capability	
9.2.2.119	Power Offset For Secondary CPICH for MIMO	
9.2.2.120	MIMO Pilot Configuration Extension	
9.2.2.121	TX Diversity on DL Control Channels by MIMO UE Capability	
9.2.2.122	Cell Capability Container	
9.2.2.123	E-RNTI List	
9.2.2.124	Precoding Weight Set Restriction	
9.2.2.125	Non-Serving RL Preconfiguration Setup	
9.2.2.126	Non-Serving RL Preconfiguration Info	
923	TDD specific Parameters	602

9.2.3.1	Block STTD Indicator	
9.2.3.2	Burst Type	
9.2.3.3	CCTrCH ID	
9.2.3.4	Cell Parameter ID	
9.2.3.4A	Constant Value	
9.2.3.4B	DL Timeslot ISCP	
9.2.3.4C	DCH TDD Information	
9.2.3.4D	DCHs TDD To Modify	
9.2.3.4E	DL Timeslot Information	
9.2.3.4F	DL Time Slot ISCP Info	
9.2.3.4G	Cell Sync Burst Code	
9.2.3.4H	Cell Sync Burst Code Shift	
9.2.3.4I	CSB Measurement ID	
9.2.3.4J	Cell Sync Burst Repetition Period	
9.2.3.4K	Cell Sync Burst SIR	
9.2.3.4L	Cell Sync Burst Timing	
9.2.3.4La	Cell Sync Burst Timing LCR	
9.2.3.4M	Cell Sync Burst Timing Threshold	
9.2.3.4N	CSB Transmission ID	
9.2.3.40	DL Timeslot Information LCR	
9.2.3.4P	DL Time Slot ISCP Info LCR	
9.2.3.4Q	UpPCH Position LCR DPCH ID	
9.2.3.5 9.2.3.5a	DSCH ID	
9.2.3.5a 9.2.3.5b	DSCH ID	
9.2.3.5A	DSCH TDD Information	
9.2.3.5A 9.2.3.5B	DwPCH Power	
9.2.3.5B 9.2.3.5C	Frame Adjustment Value	
9.2.3.5D	IPDL TDD Parameter	
9.2.3.5E	Max FPACH Power	
9.2.3.5F	HS-DSCH TDD Information	
9.2.3.5G	HS-DSCH TDD Information Response	
9.2.3.5GA	HS-DSCH TDD Update Information	
9.2.3.5Ga	HS-SCCH ID.	
9.2.3.5Gb	HS-SICH ID.	
9.2.3.5Gc	1.28 Mcps TDD Uplink Physical Channel Capability	
9.2.3.5H	IPDL TDD Parameters LCR	
9.2.3.5I	TSN-Length	
9.2.3.5J	Extended HS-SCCH ID	
9.2.3.5K	Extended HS-SICH ID	
9.2.3.6	Max PRACH Midamble Shift	615
9.2.3.7	Midamble Shift And Burst Type	616
9.2.3.7A	Midamble Shift LCR	616
9.2.3.7Aa	Notification Indicator Length	617
9.2.3.7B	Number Of Cycles Per SFN Period	
9.2.3.7C	Number Of Repetitions Per Cycle Period	
9.2.3.7D	Number Of Subcycles Per Cycle Period	617
9.2.3.8	Paging Indicator Length	
9.2.3.9	PCCPCH Power	
9.2.3.10	PDSCH ID	
9.2.3.11	PDSCH Set ID	
9.2.3.11A	Primary CCPCH RSCP	
9.2.3.11B	Primary CCPCH RSCP Delta	
9.2.3.12	PUSCH ID	
9.2.3.13	PUSCH Set ID	
9.2.3.14	PRACH Midamble	
9.2.3.14A	Reference Clock Availability	
9.2.3.14B	Reference SFN Offset	
9.2.3.15	Repetition Length	
9.2.3.16	Repetition Period	
9.2.3.17 9.2.3.18	SCH Time Slot	
7.4.3.10	sync case	020

9.2.3.18A	Special Burst Scheduling	
9.2.3.18B	SYNC_DL Code ID	621
9.2.3.18C	Sync Frame Number	
9.2.3.18D	Synchronisation Report Characteristics	621
9.2.3.18E	Synchronisation Report Type	622
9.2.3.18F	TDD ACK NACK Power Offset	
9.2.3.19	TDD Channelisation Code	
9.2.3.19a	TDD Channelisation Code LCR	623
9.2.3.19A	TDD DPCH Offset	
9.2.3.19B	TDD DL Code Information	624
9.2.3.19C	TDD DL Code Information LCR	
9.2.3.19D	TDD DL DPCH Time Slot Format LCR	624
9.2.3.20	TDD Physical Channel Offset	
9.2.3.21	TDD TPC DL Step Size	625
9.2.3.21a	TDD TPC UL Step Size	625
9.2.3.21A	TDD UL Code Information	625
9.2.3.21B	TDD UL Code Information LCR	
9.2.3.21C	TDD UL DPCH Time Slot Format LCR	626
9.2.3.22	TFCI Coding	626
9.2.3.22a	Timing Adjustment Value	
9.2.3.22b	Timing Adjustment Value LCR	626
9.2.3.22A	Timing Advance Applied	
9.2.3.23	Time Slot	
9.2.3.24	Time Slot Direction	627
9.2.3.24A	Time Slot LCR	
9.2.3.24B	Time Slot LCR Extension	627
9.2.3.25	Time Slot Status	627
9.2.3.26	Transmission Diversity Applied	
9.2.3.26A	UL Timeslot ISCP	628
9.2.3.26B	UL PhysCH SF Variation	628
9.2.3.26C	UL Timeslot Information	
9.2.3.26D	UL Time Slot ISCP Info	
9.2.3.26E	UL Timeslot Information LCR	
9.2.3.26F	UL Time Slot ISCP Info LCR	
9.2.3.26G	Uplink Synchronisation Frequency	
9.2.3.26H	Uplink Synchronisation Step Size	
9.2.3.27	USCH ID	
9.2.3.28	USCH Information	
9.2.3.29	USCH Information Response	
9.2.3.30	SCTD Indicator	631
9.2.3.31	PLCCH Information	
9.2.3.32	PLCCH Sequence Number	
9.2.3.33	Common Physical Channel ID 7.68Mcps	
9.2.3.34	TDD Channelisation Code 7.68Mcps	
9.2.3.35	Midamble Shift And Burst Type 7.68Mcps	
9.2.3.36	Common Physical Channel Status Information 7.68Mcps	
9.2.3.37	Neighbouring TDD Cell Measurement Information 7.68Mcps	
9.2.3.38	UL Timeslot Information 7.68Mcps TDD	
9.2.3.39	DL Timeslot Information 7.68Mcps TDD	
9.2.3.40	TDD UL Code Information 7.68Mcps TDD	
9.2.3.41	TDD DL Code Information 7.68Mcps TDD	
9.2.3.42	DPCH ID 7.68Mcps	
9.2.3.43	PDSCH ID 7.68Mcps	
9.2.3.44	Max E-RUCCH Midamble Shift	
9.2.3.45	E-PUCH Information	
9.2.3.45a	E-PUCH Information LCR	
9.2.3.46	E-TFCS Information TDD	
9.2.3.47	E-DCH MAC-d Flows Information TDD	
9.2.3.48	E-DCH Non-scheduled Grant Information TDD	
9.2.3.48a	E-DCH Non-scheduled Grant Information LCR TDD	
9.2.3.49	E-DCH TDD Information	
9.2.3.49a	E-DCH TDD Information LCR	640

9.2.3.50	E-DCH TDD Information Response	
9.2.3.51	E-AGCH ID TDD	
9.2.3.51a	E-HICH ID TDD	
9.2.3.51b	Extended E-HICH ID TDD	
9.2.3.52	E-DCH TDD Information to Modify	
9.2.3.53	E-DCH Grant Type TDD	
9.2.3.54	Timeslot Resource Related Information	
9.2.3.54a	Timeslot Resource Related Information LCR	
9.2.3.55	Power Resource Related Information	
9.2.3.56	E-PUCH Offset	
9.2.3.57	E-DCH TDD Maximum Bitrate	
9.2.3.58	LTGI Presence	
9.2.3.59	E-HICH Time Offset	
9.2.3.59a	E-HICH Time Offset LCR	
9.2.3.60 9.2.3.61	E-DCH TDD Capacity Consumption Law E-DCH HARQ Power Offset TDD	
9.2.3.61a	E-DCH MAC-d Flow Retransmission Timer	
9.2.3.62	SNPL Reporting Type	
9.2.3.63	Maximum Generated Received Total Wide Band Power in Other Cells	
9.2.3.64	E-DCH Non-scheduled Grant Information 7.68Mcps TDD	
9.2.3.65	E-DCH TDD Information 7.68Mcps	
9.2.3.66	E-DCH TDD Maximum Bitrate 7.68Mcps	
9.2.3.67	E-DCH Physical Layer Category LCR	
9.2.3.67A	Extended E-DCH Physical Layer Category LCR	
9.2.3.68	E-HICH Type	
9.2.3.69	Maximum Target Received Total Wide Band Power LCR	
9.2.3.70	MBSFN Only Mode Indicator.	
9.2.3.71	MBSFN Only Mode Capability	
9.2.3.72	HS-DSCH Common System Information LCR	
9.2.3.73	HS-DSCH Paging System Information LCR	
9.2.3.74	HS-DSCH Common System Information Response LCR	651
9.2.3.75	HS-DSCH Paging System Information Response LCR	
9.2.3.76	Common MAC Flow ID LCR	
9.2.3.77	HSDPA Associated PICH Information LCR	
9.2.3.78	Common MAC Flows To Delete LCR	
9.2.3.79	Common E-DCH System Information LCR	
9.2.3.80	Common E-DCH System Information Response LCR	
9.2.3.81	Common E-DCH MAC-d Flow Specific Information LCR	
9.2.3.82	Enhanced UE DRX Information LCR	
9.2.3.83	Common E-PUCH Information LCR	
9.2.3.84	Common E-RNTI Information LCR	
9.2.3.85	Paging MAC Flows To Delete LCR	
9.2.3.86 9.2.3.87	Common E-DCH MAC-d Flows To Delete LCR	
9.2.3.87	Common E-DCH MAC-d Flow ID LCR	
9.2.3.89	BCCH Specific HS-DSCH RNTI Information LCR	
9.2.3.90	MAC-es Maximum Bit Rate LCR	
9.2.3.90	Semi-Persistent scheduling Capability LCR	
9.2.3.92	Continuous Packet Connectivity DRX Capability LCR	660
9.2.3.93	Continuous Packet Connectivity DRX Information LCR	
9.2.3.94	Continuous Packet Connectivity DRX Information To Modify LCR	
9.2.3.95	Continuous Packet Connectivity DRX Information Response LCR	
9.2.3.96	HS-DSCH Semi-Persistent scheduling Information LCR	
9.2.3.96a	HS-DSCH Semi-Persistent scheduling Information to modify LCR	
9.2.3.97	E-DCH Semi-Persistent scheduling Information LCR	
9.2.3.97a	E-DCH Semi-Persistent scheduling Information to modify LCR	
9.2.3.98	HS-DSCH Semi-Persistent scheduling Information Response LCR	
9.2.3.99	E-DCH Semi-Persistent scheduling Information Response LCR	
9.2.3.100	HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR	
9.2.3.101	E-DCH Semi-Persistent scheduling Deactivate Indicator LCR	
9.2.3.102	Idle Interval Information	
9.2.3.103	HS-SICH Reference Signal Information	671

D.3 I		ding Variant 1ding Variant 2	
	B_SG_DATA Enco	ding Variant 1	1173
D.2 I			
	Overall Description.		
	D (normative):	IB_SG_DATA Encoding	
C.3.3 C.4		LE MESSAGE	
C.3.4 C.3.5			
C.3.3 C.3.4			
C.3.2 C.3.3			
C.3.1 C.3.2			
C.3.1		ty Diagnostics	
C.2 C.3	1		
C.1 C.2		ived EXAMPLE MESSAGE	
Annex C.1	C (informative):	Guidelines for Usage of the Criticality Diagnostics IE  AGE Layout	
		Measurement Reporting	
	•	cess	
A.3 T	The Allocation/Reter	ntion Process	1159
		nformation for a Radio Link	
A.1.2	Modification of an	Existing Radio Link	1157
A.1.1		New Radio Link	
А.1 Г	Deriving Allocation	Information for a Radio Link	
Annex	A (normative):	Allocation and Pre-emption of Radio Links in the Node B	1157
10.5	Exceptions		1156
10.4	-		•
10.3.6		s Received in Wrong Order or With Too Many Occurrences or Erroneous	
10.3.5		E Group	
10.3.4.2	J 1	han the Procedure ID and Type of Message	
10.3.4.1		ssage	
10.3.4.1		)	
10.3.4		ded IE/IE group	
10.3.2	•	nation	
10.3.1		mation	
10.3 10.3.1	•	ror	
10.2 10.3	•	ror	
10.1			
		n, Unforeseen and Erroneous Protocol Data	
9.5			
9.4		Syntax	
9.3.7		itions	
9.3.6		tions	
9.3.5		itions	
9.3.4		ments Definitions	
9.3.3	•	S	
9.3.2	<u> </u>	cedure Definitions	
9.3.1		e Message mechanism for non-standard use	
9.3 9.3.0		nation Element Abstract Syntax (with ASN.1)	
0.2		MBMS Service Information	

Annex F (informative):	Change History	1176
History		1179

# Foreword

This Technical Specification has been produced by the 3GPP.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of this TS, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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- x the first digit:
  - 1 presented to TSG for information;
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- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

#### 1 Scope

The present document specifies the radio network layer signalling protocol called Node B Application Part (NBAP) specification to be used for Control Plane over Iub Interface.

#### 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document.
- [1] 3GPP TS 25.401: "UTRAN Overall Description". [2] 3GPP TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Signalling for DCH Data Streams". CCITT Recommendation X.731 (01/92): "Information Technology – Open Systems [3] Interconnection – Systems Management: State Management function". 3GPP TS 25.215: "Physical layer - Measurements (FDD)". [4] 3GPP TS 25.225: "Physical layer – Measurements (TDD)". [5] [6] 3GPP TS 25.430: "UTRAN Iub General Aspect and Principle". 3GPP TS 25.211: "Physical channels and mapping of transport channels onto physical channels [7] (FDD)". 3GPP TS 25.212: "Multiplexing and channel coding (FDD)". [8] 3GPP TS 25.213: "Spreading and modulation (FDD)". [9] [10] 3GPP TS 25.214: "Physical layer procedures (FDD)". ITU-T Recommendation X.691, (07/2002) "Information technology - ASN.1 encoding rules -[11] Specification of Packed Encoding Rules (PER)".
- [12] ITU-T Recommendation X.680, (07/2002) "Information Technology - Abstract Syntax Notation
- One (ASN.1): Specification of basic notation".
- ITU-T Recommendation X.681, (07/2002) "Information Technology Abstract Syntax Notation [13] One (ASN.1): Information object specification".
- [14] 3GPP TS 25.104: "UTRA (BS) FDD; Radio Transmission and Reception".
- 3GPP TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception". [15]
- 3GPP TS 25.427: "UTRAN Iur/Iub Interface User Plane Protocol for DCH Data Stream". [16]
- 3GPP TS 25.402: "Synchronisation in UTRAN Stage2". [17]
- 3GPP TS 25.331: "RRC Protocol Specification". [18]

[19]	3GPP TS25.221: "Physical channels and mapping of transport channels onto physical channels[TDD]".
[20]	3GPP TS 25.223: "Spreading and modulation (TDD)".
[21]	3GPP TS 25.224: "Physical Layer Procedures (TDD)".
[22]	3GPP TS 25.133: "Requirements for support of Radio Resource management (FDD)".
[23]	3GPP TS 25.123: "Requirements for support of Radio Resource management (TDD)".
[24]	3GPP TS 25.435: "UTRAN Iub Interface: User Plane Protocols for Common Transport Channel Data Streams".
[25]	3GPP TS 25.302: "Services Provided by the Physical Layer".
[26]	3GPP TR 25.921: "Guidelines and Principles for Protocol Description and Error Handling".
[27]	ICD-GPS-200: "Navstar GPS Space Segment/Navigation User Interface".
[28]	RTCM-SC104: "RTCM Recommended Standards for Differential GNSS Service (v.2.2)".
[29]	IETF RFC 2460 "Internet Protocol, Version 6 (IPv6) Specification".
[30]	IETF RFC 768 "User Datagram Protocol", (8/1980)
[31]	3GPP TS 25.434: "UTRAN Iub Interface Data Transport & Transport Signalling for Common Transport Channel Data Streams ".
[32]	3GPP TS 25.321: "MAC protocol specification".
[33]	3GPP TS 25.306: "UE Radio Access capabilities".
[34]	3GPP TS 25.222: "Multiplexing and Channel Coding (TDD)".
[35]	IETF RFC 2474 "Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers".
[36]	IETF RFC 2475 "An Architecture for Differentiated Services".
[37]	3GPP TS 25.304: "User Equipment (UE) procedures in idle mode and procedures for cell reselection in connected mode".
[38]	3GPP TS 25.319: "Enhanced Uplink; Overall description; Stage 2".
[39]	Galileo OS Signal in Space ICD (OS SIS ICD), Draft 0, Galileo Joint Undertaking, May 23 <sup>rd</sup> , 2006.
[40]	3GPP TR 25.905: "Feasibility study on improvement of the Multimedia Broadcast / Multicast Service (MBMS) in UTRAN"
[41]	IETF RFC 3376 "Internet Group Management Protocol, Version 3".
[42]	IETF RFC 3810 "Multicast Listener Discovery Version 2 (MLDv2) for IPv6".
[43]	IS-GPS-200, Revision D, Navstar GPS Space Segment/Navigation User Interfaces, March 7 <sup>th</sup> , 2006.
[44]	IS-GPS-705, Navstar GPS Space Segment/User Segment L5 Interfaces, September 22, 2005.
[45]	IS-GPS-800, Navstar GPS Space Segment/User Segment L1C Interfaces, March 31, 2008.
[46]	Specification for the Wide Area Augmentation System (WAAS), US Department of Transportation, Federal Aviation Administration, DTFA01-96-C-00025, 2001.
[47]	IS-QZSS, Quasi Zenith Satellite System Navigation Service Interface Specifications for QZSS, Ver.1.0, June 17, 2008.

[48]	Global Navigation Satellite System GLONASS Interface Control Document, Version 5, 2002.
[49]	3GPP TS 25.308: "High Speed Downlink Packet Access (HSDPA); Overall description; Stage 2"
[50]	3GPP TS 36.133: "Requirements for support of radio resource management".

# 3 Definitions, Symbols and Abbreviations

### 3.1 Definitions

For the purposes of the present document, the following terms and definitions apply.

**CRNC Communication Context:** The CRNC Communication Context contains the necessary information for the CRNC for communication with a specific UE. The CRNC Communication Context is identified by the CRNC Communication Context ID.

**Elementary Procedure**: The NBAP protocol consists of Elementary Procedures (EPs). An Elementary Procedure is a unit of interaction between the CRNC and the Node B.

An EP consists of an initiating message and possibly a response message.

Two kinds of EPs are used:

- Class 1: Elementary Procedures with response (success or failure).
- Class 2: Elementary Procedures without response.

For Class 1 EPs, the types of responses can be as follows:

Successful

- A signalling message explicitly indicates that the elementary procedure has been successfully completed with the receipt of the response.

Unsuccessful

- A signalling message explicitly indicates that the EP failed.

Class 2 EPs are considered always successful.

**Node B Communication Context:** The Node B Communication Context contains the necessary information for the Node B for communication with a specific UE. The Node B Communication Context is created by the Radio Link Setup procedure and deleted by the Radio Link Deletion procedure when deleting the last Radio Link within the Node B Communication Context. The Node B Communication Context is identified by the Node B Communication Context ID.

**Prepared Reconfiguration:** A Prepared Reconfiguration exists when the Synchronised Radio Link Reconfiguration Preparation procedure has been completed successfully. The Prepared Reconfiguration does not exist anymore only after either of the procedures Synchronised Radio Link Reconfiguration Commit or Synchronised Radio Link Reconfiguration Cancellation has been completed. In particular, the Prepared Reconfiguration still exists if the object (e.g. Radio Link) concerned by the Synchronised Radio Link Reconfiguration (e.g. in the case of an HS-DSCH Setup) is removed, but the Node B Communication Context still exists.

# 3.2 Symbols

Void.

## 3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

A-GPS Assisted GPS

AICH Acquisition Indicator Channel
ALCAP Access Link Control Application Part
ASN.1 Abstract Syntax Notation One
BCCH Broadcast Control Channel

CCPCH Common Control Physical Channel

CFN Connection Frame Number

CM Compressed Mode CPICH Common Pilot Channel

CRNC Controlling Radio Network Controller

DCH Dedicated Channel
DGANSS Differential GANSS
DGPS Differential GPS
DL Downlink

DPCCH Dedicated Physical Control Channel
DPCH Dedicated Physical Channel
DPDCH Dedicated Physical Data Channel

DSCH Downlink Shared Channel E-AGCH E-DCH Absolute Grant Channel

E-DCH Enhanced UL DCH

EGNOS European Geostationary Navigation Overlay Service
E-HICH E-DCH HARQ Acknowledgement Indicator Channel
E-PUCH Enhanced Uplink Physical Channel (TDD only)

E-RNTI E-DCH RNTI

E-RUCCH E-DCH Random Access Uplink Control Channel (TDD only)

E-TFCI E-DCH Transport Format Combination Indicator E-UCCH E-DCH Uplink Control Channel (TDD only)

FACH Forward Access Channel FDD Frequency Division Duplex

F-DPCH Fractional DPCH FP Frame Protocol

FPACH Fast Physical Access Channel (TDD only)
GAGAN GPS Aided Geo Augmented Navigation

GANSS Galileo and Additional Navigation Satellite Systems

GLONASS GLObal'naya NAvigatsionnaya Sputnikovaya Sistema (Engl.: Global Navigation Satellite System)

GNSS Global Navigation Satellite System
GPS Global Positioning System

HSDPA High Speed Downlink Packet Access
HS-DSCH High Speed Downlink Shared Channel

HS-PDSCH High Speed Physical Downlink Shared Channel

HS-SCCH High Speed Shared Control Channel
HS-SICH High Speed Shared Information Channel

ICD Interface Control Document IMB Integrated Mobile Broadcast

IP Internet Protocol

IPDL Idle Periods in the DownLink ISCP Interference Signal Code Power

L1 Layer 1 L2 Layer 2

MBMS Multimedia Broadcast Multicast Service
MBSFN MBMS over a Single Frequency Network

MFN Multicast Frame Number
MIB Master Information Block

MICH MBMS Notification Indicator Channel

MSAS Multi-functional Satellite Augmentation System

NBAP Node B Application Part NI MBMS Notification Indicator O&M Operation and Maintenance

PCCPCH Primary Common Control Physical Channel

PCH Paging Channel

PDSCH Physical Downlink Shared Channel

PICH Paging Indication Channel

PLCCH Physical Layer Common Control Channel

PUSCH Physical Uplink Shared Channel QZSS Quasi-Zenith Satellite System RACH Random Access Channel

RL Radio Link RLS Radio Link Set

RNC Radio Network Controller RRC Radio Resource Control SB Scheduling Block

SBAS Satellite Based Augmentation System

SCCPCH Secondary Common Control Physical Channel

SCH Synchronisation Channel
SCTD Space Code Transmit Diversity
SIB System Information Block
Space Code Transmit Diversity
Signature Region Naturals Control

SRNC Serving Radio Network Controller STTD Space Time Transmit Diversity

TDD Time Division Duplex

TFC Transport Format Combination

TFCI Transport Format Combination Indicator
TFCS Transport Format Combination Set

TFS Transport Format Set TPC Transmit Power Control

TSTD Time Switched Transmit Diversity

UARFCN UTRA Absolute Radio Frequency Channel Number

UDP User Datagram Protocol

UE User Equipment

UL Uplink

UMTS Universal Mobile Telecommunications System

USCH Uplink Shared Channel
UTC Universal Coordinated Time
UTRA Universal Terrestrial Radio Access

UTRAN Universal Terrestrial Radio Access Network

WAAS Wide Area Augmentation System

# 4 General

# 4.1 Procedure Specification Principles

The principle for specifying the procedure logic is to specify the functional behaviour of the Node B exactly and completely. The CRNC functional behaviour is left unspecified. The Reset procedure is an exception from this principle.

The following specification principles have been applied for the procedure text in subclause 8:

- The procedure text discriminates between:
  - 1) Functionality which "shall" be executed

The procedure text indicates that the receiving node "shall" perform a certain function Y under a certain condition. If the receiving node supports procedure X but cannot perform functionality Y requested in the REQUEST message of a Class 1 EP, the receiving node shall respond with the message used to report unsuccessful outcome for this procedure, containing an appropriate cause value.

2) Functionality which "shall, if supported" be executed

The procedure text indicates that the receiving node "shall, if supported," perform a certain function Y under a certain condition. If the receiving node supports procedure X, but does not support functionality Y, the receiving node shall proceed with the execution of the EP, possibly informing the requesting node about the not supported functionality.

- Any required inclusion of an optional IE in a response message is explicitly indicated in the procedure text. If the procedure text does not explicitly indicate that an optional IE shall be included in a response message, the optional IE shall not be included. For requirements on including *Criticality Diagnostics* IE, see section 10. For examples on how to use the *Criticality Diagnostics* IE, see Annex C.

# 4.2 Forwards and Backwards Compatibility

The forwards and backwards compatibility of the protocol is assured by a mechanism in which all current and future messages, and IEs or groups of related IEs, include Id and criticality fields that are coded in a standard format that will not be changed in the future. These parts can always be decoded regardless of the standard version.

# 4.3 Specification Notations

[7.68Mcps TDD - ...]

For the purposes of the present document, the following notations apply:

[FDD]	This tagging of a word indicates that the word preceding the tag "[FDD]" applies only to FDD. This tagging of a heading indicates that the heading preceding the tag "[FDD]" and the section following the heading applies only to FDD.	
[TDD]	This tagging of a word indicates that the word preceding the tag "[TDD]" applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[TDD]" and the section following the heading applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD.	
[3.84Mcps TDD]	This tagging of a word indicates that the word preceding the tag "[3.84Mcps TDD]" applies only to 3.84Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[3.84Mcps TDD]" and the section following the heading applies only to 3.84Mcps TDD.	
[1.28Mcps TDD]	This tagging of a word indicates that the word preceding the tag "[1.28Mcps TDD]" applies only to 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[1.28Mcps TDD]" and the section following the heading applies only to 1.28Mcps TDD.	
[7.68Mcps TDD]	This tagging of a word indicates that the word preceding the tag "[7.68Mcps TDD]" applies only to 7.68Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[7.68Mcps TDD]" and the section following the heading applies only to 7.68Mcps TDD.	
[FDD]	This tagging indicates that the enclosed text following the "[FDD - " applies only to FDD. Multiple sequential paragraphs applying only to FDD are enclosed separately to enable insertion of TDD specific (or common) paragraphs between the FDD specific paragraphs.	
[TDD]	This tagging indicates that the enclosed text following the "[TDD - " applies only to TDD, including 3.84Mcps TDD, 7.68Mcps TDD and 1.28Mcps TDD. Multiple sequential paragraphs applying only to TDD are enclosed separately to enable insertion of FDD specific (or common) paragraphs between the TDD specific paragraphs.	
[3.84Mcps TDD]	This tagging indicates that the enclosed text following the "[3.84Mcps TDD - " applies only to 3.84Mcps TDD. Multiple sequential paragraphs applying only to 3.84Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 3.84Mcps TDD specific paragraphs.	
[1.28Mcps TDD]	This tagging indicates that the enclosed text following the "[1.28Mcps TDD - " applies only to 1.28Mcps TDD. Multiple sequential paragraphs applying only to 1.28Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 1.28Mcps TDD specific paragraphs.	

paragraphs between the 7.68Mcps TDD specific paragraphs.

This tagging indicates that the enclosed text following the "[7.68Mcps TDD - " applies

only to 7.68Mcps TDD. Multiple sequential paragraphs applying only to 7.68Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common)

[3.84Mcps TDD IMB -...] This tagging of a word indicates that the word preceding the tag "[3.84Mcps TDD

IMB]" applies only to 3.84Mcps TDD IMB. This tagging of a heading indicates that the heading preceding the tag "[3.84Mcps TDD IMB]" and the section following the heading

applies only to 3.84Mcps TDD IMB.

Procedure When referring to an elementary procedure in the specification the Procedure Name is

written with the first letters in each word in upper case characters followed by the word

"procedure", e.g. Radio Link Setup procedure.

Message When referring to a message in the specification the MESSAGE NAME is written with all

letters in upper case characters followed by the word "message", e.g. RADIO LINK

SETUP REQUEST message.

IE When referring to an information element (IE) in the specification the *Information Element* 

*Name* is written with the first letters in each word in upper case characters and all letters in

Italic font followed by the abbreviation "IE", e.g. Transport Format Set IE.

Value of an IE When referring to the value of an information element (IE) in the specification the "Value"

is written as it is specified in subclause 9.2 enclosed by quotation marks, e.g. "Abstract

Syntax Error (Reject)".

## 5 NBAP Services

## 5.1 Parallel Transactions

Unless explicitly indicated in the procedure description, at any instance in time one protocol peer shall have a maximum of one ongoing dedicated NBAP procedure related to a certain Node B Communication Context.

# 6 Services Expected from Signalling Transport

NBAP requires an assured in-sequence delivery service from the signalling bearer, and notification if the assured in-sequence delivery service is no longer available.

# 7 Functions of NBAP

The NBAP protocol provides the following functions:

- Cell Configuration Management. This function gives the CRNC the possibility to manage the cell configuration information in a Node B.
- Common Transport Channel Management. This function gives the CRNC the possibility to manage the configuration of Common Transport Channels in a Node B.
- System Information Management. This function gives the CRNC the ability to manage the scheduling of System Information to be broadcast in a cell.
- Resource Event Management. This function gives the Node B the ability to inform the CRNC about the status of Node B resources.
- Configuration Alignment. This function gives the CRNC and the Node B the possibility to verify and enforce that both nodes have the same information on the configuration of the radio resources.
- Measurements on Common Resources. This function allows the CRNC to initiate measurements on common resources in the Node B. The function also allows the Node B to report the result of the measurements.
- Radio Link Management. This function allows the CRNC to manage radio links using dedicated resources in a Node B.

- Radio Link Supervision. This function allows the CRNC to report failures and restorations of a Radio Link.
- Compressed Mode Control [FDD]. This function allows the CRNC to control the usage of compressed mode in a Node B.
- Measurements on Dedicated Resources. This function allows the CRNC to initiate measurements on dedicated resources in the Node B. The function also allows the Node B to report the result of the measurements.
- DL Power Drifting Correction [FDD]. This function allows the CRNC to adjust the DL power level of one or more Radio Links in order to avoid DL power drifting between the Radio Links.
- Reporting of General Error Situations. This function allows reporting of general error situations, for which function specific error messages have not been defined.
- Physical Shared Channel Management. This function allows the CRNC to manage physical resources in the Node B belonging to High Speed Downlink Shared Channels and High Speed Shared Control Channels [TDD and High Speed Shared Indication Channels and Shared Channels (USCH/DSCH)].
- DL Power Timeslot Correction [TDD]. This function enables the Node B to apply an individual offset to the transmission power in each timeslot according to the downlink interference level at the UE.
- Cell Synchronisation [1.28 Mcps TDD and 3.84 Mcps TDD]. This function allows the synchronisation of cells or Node Bs via the air interface.
- Information Exchange. This function allows the CRNC to initiate information provision from the Node B. The function also allows the Node B to report the requested information.
- Bearer Rearrangement. This function allows the Node B to indicate the need for bearer re-arrangement for a Node B Communication Context. The function also allows the CRNC to re-arrange bearers for a Node B Communication Context.
- MBMS Notification. This function allows the CRNC to send MBMS Notification indicators to the Node B to be broadcasted in a cell.
- UE Status Notification [FDD and 1.28 Mcps TDD]. This function allows the CRNC to update UE related information stored in the Node B.

The mapping between the above functions and NBAP elementary procedures is shown in the table below.

Table 1: Mapping between functions and NBAP elementary procedures

Function	Elementary Procedure(s)
Cell Configuration Management	a) Cell Setup
	b) Cell Reconfiguration
	c) Cell Deletion
Common Transport Channel Management	a) Common Transport Channel Setup
	b) Common Transport Channel Reconfiguration
	c) Common Transport Channel Deletion
System Information Management	System Information Update
Resource Event Management	a) Block Resource
	b) Unblock Resource
Configuration Alignment	c) Resource Status Indication a) Audit Required
Configuration Alignment	b) Audit
	c) Reset
Measurements on Common Resources	a) Common Measurement Initiation
Measurements on Common Nesources	b) Common Measurement Reporting
	c) Common Measurement Termination
	d) Common Measurement Failure
Radio Link Management.	a) Radio Link Setup
	b) Radio Link Addition
	c) Radio Link Deletion
	d) Unsynchronised Radio Link Reconfiguration
	e) Synchronised Radio Link Reconfiguration Preparation
	f) Synchronised Radio Link Reconfiguration Commit
	g) Synchronised Radio Link Reconfiguration Cancellation
	h) Radio Link Pre-emption
	i) Radio Link Activation
	j) Radio Link Parameter Update
Radio Link Supervision.	a) Radio Link Failure
Compressed Made Control (FDD)	b) Radio Link Restoration
Compressed Mode Control [FDD]	a) Radio Link Setup b) Radio Link Addition
	c) Compressed Mode Command
	d) Unsynchronised Radio Link Reconfiguration
	e) Synchronised Radio Link Reconfiguration Preparation
	f) Synchronised Radio Link Reconfiguration Commit
	g) Synchronised Radio Link Reconfiguration Cancellation
Measurements on Dedicated Resources	a) Dedicated Measurement Initiation
	b) Dedicated Measurement Reporting
	c) Dedicated Measurement Termination
	d) Dedicated Measurement Failure
DL Power Drifting Correction [FDD]	Downlink Power Control
Reporting of General Error Situations	Error Indication
Physical Shared Channel Management	Physical Shared Channel Reconfiguration
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control
Cell Synchronisation [1.28 Mcps TDD and 3.84	a) Cell Synchronisation Initiation
Mcps TDD]	b) Cell Synchronisation Reconfiguration
	c) Cell Synchronisation Reporting
	d) Cell Synchronisation Termination
	e) Cell Synchronisation Failure
Information Eychango	f) Cell Synchronisation Adjustment a) Information Exchange Initiation
Information Exchange	b) Information Exchange Initiation     b) Information Reporting
	c) Information Exchange Termination
	d) Information Exchange Failure
Bearer Re-arrangement	a) Bearer Re-arrangement Indication
Social No allangomone	b) Unsynchronised Radio Link Reconfiguration
	c) Synchronised Radio Link Reconfiguration Preparation
	d) Synchronised Radio Link Reconfiguration Commit
	e) Synchronised Radio Link Reconfiguration Cancellation
MBMS Notification	a) MBMS Notification Update
UE Status Notification [FDD and 1.28 Mcps	a) UE Status Update
TDDI	

# 8 NBAP Procedures

# 8.1 Elementary Procedures

NBAP procedures are divided into common procedures and dedicated procedures.

- NBAP common procedures are procedures that request initiation of a Node B Communication Context for a specific UE in Node B or are not related to a specific UE. NBAP common procedures also incorporate logical O&M [1] procedures.
- NBAP dedicated procedures are procedures that are related to a specific Node B Communication Context in Node B. This Node B Communication Context is identified by a Node B Communication Context identity.

The two types of procedures may be carried on separate signalling links.

In the following tables, all EPs are divided into Class 1 and Class 2 EPs:

Table 2: Class 1

Elementary	Message	Successful Outcome	Unsuccessful Outcome
Procedure		Response message	Response message
Cell Setup	CELL SETUP REQUEST	CELL SETUP RESPONSE	CELL SETUP FAILURE
Cell	CELL RECONFIGURATION	CELL RECONFIGURATION	CELL RECONFIGURATION
Reconfiguration	REQUEST	RESPONSE	FAILURE
Cell Deletion	CELL DELETION REQUEST	CELL DELETION RESPONSE	
Common	COMMON TRANSPORT	COMMON TRANSPORT	COMMON TRANSPORT
Transport	CHANNEL SETUP	CHANNEL SETUP RESPONSE	CHANNEL SETUP FAILURE
Channel Setup	REQUEST	001111011 TD 1110D0DT	001111011701100007
Common	COMMON TRANSPORT	COMMON TRANSPORT	COMMON TRANSPORT
Transport Channel	CHANNEL   RECONFIGURATION	CHANNEL RECONFIGURATION RESPONSE	CHANNEL RECONFIGURATION FAILURE
Reconfiguration	REQUEST	RESPONSE	RECONFIGURATION FAILURE
Common	COMMON TRANSPORT	COMMON TRANSPORT	
Transport	CHANNEL DELETION	CHANNEL DELETION	
Channel Deletion	REQUEST	RESPONSE	
Physical Shared	PHYSICAL SHARED	PHYSICAL SHARED CHANNEL	PHYSICAL SHARED
Channel	CHANNEL	RECONFIGURATION	CHANNEL
Reconfiguration	RECONFIGURATION	RESPONSE	RECONFIGURATION FAILURE
	REQUEST		
Audit	AUDIT REQUEST	AUDIT RESPONSE	AUDIT FAILURE
Block Resource	BLOCK RESOURCE	BLOCK RESOURCE RESPONSE	BLOCK RESOURCE FAILURE
	REQUEST		
Radio Link Setup	RADIO LINK SETUP	RADIO LINK SETUP RESPONSE	RADIO LINK SETUP FAILURE
0	REQUEST	OVOTERA INICODRARTIONI	CVOTERA INICODRARTICAL
System	SYSTEM INFORMATION	SYSTEM INFORMATION	SYSTEM INFORMATION
Information Update	UPDATE REQUEST	UPDATE RESPONSE	UPDATE FAILURE
Common	COMMON MEASUREMENT	COMMON MEASUREMENT	COMMON MEASUREMENT
Measurement	INITIATION REQUEST	INITIATION RESPONSE	INITIATION FAILURE
Initiation	INTERVIEW CECT	INTERVIOR REGIONAL	INTERNATION TALESTE
Radio Link	RADIO LINK ADDITION	RADIO LINK ADDITION	RADIO LINK ADDITION
Addition	REQUEST	RESPONSE	FAILURE
Radio Link	RADIO LINK DELETION	RADIO LINK DELETION	
Deletion	REQUEST	RESPONSE	
Synchronised	RADIO LINK	RADIO LINK	RADIO LINK
Radio Link	RECONFIGURATION	RECONFIGURATION READY	RECONFIGURATION FAILURE
Reconfiguration	PREPARE		
Preparation	DADIO LINIK	DADIO LINIK	DADIO LINIK
Unsynchronised	RADIO LINK	RADIO LINK	RADIO LINK
Radio Link	RECONFIGURATION REQUEST	RECONFIGURATION RESPONSE	RECONFIGURATION FAILURE
Reconfiguration  Dedicated	DEDICATED	DEDICATED MEASUREMENT	DEDICATED MEASUREMENT
Measurement	MEASUREMENT	INITIATION RESPONSE	INITIATION FAILURE
Initiation	INITIATION REQUEST	INTIATION RESI SINSE	INITIATION TAILONE
Reset	RESET REQUEST	RESET RESPONSE	
			0511 00410115 01110 171011
Cell Synchronisation	CELL SYNCHRONISATION	CELL SYNCHRONISATION	CELL SYNCHRONISATION
•	INITIATION REQUEST	INITIATION RESPONSE	INITIATION FAILURE
Initiation [TDD] Cell	CELL SYNCHRONISATION	CELL SYNCHRONISATION	CELL SYNCHRONISATION
Synchronisation	RECONFIGURATION	RECONFIGURATION	RECONFIGURATION FAILURE
Reconfiguration	REQUEST	RESPONSE	RECONFIGURATION FAILURE
[TDD]			
Cell	CELL SYNCHRONISATION	CELL SYNCHRONISATION	CELL SYNCHRONISATION
Synchronisation	ADJUSTMENT REQUEST	ADJUSTMENT RESPONSE	ADJUSTMENT FAILURE
Adjustment [TDD]			
Information	INFORMATION EXCHANGE	INFORMATION EXCHANGE	INFORMATION EXCHANGE
Exchange	INITIATION REQUEST	INITIATION RESPONSE	INITIATION FAILURE
Initiation			

Table 3: Class 2

Elementary Procedure	Message	
Resource Status Indication	RESOURCE STATUS INDICATION	
Audit Required	AUDIT REQUIRED INDICATION	
Common Measurement Reporting	COMMON MEASUREMENT REPORT	
Common Measurement Termination	COMMON MEASUREMENT TERMINATION	
	REQUEST	
Common Measurement Failure	COMMON MEASUREMENT FAILURE	
	INDICATION	
Synchronised Radio Link Reconfiguration	RADIO LINK RECONFIGURATION COMMIT	
Commit		
Synchronised Radio Link Reconfiguration	RADIO LINK RECONFIGURATION CANCEL	
Cancellation		
Radio Link Failure	RADIO LINK FAILURE INDICATION	
Radio Link Restoration	RADIO LINK RESTORE INDICATION	
Dedicated Measurement Reporting	DEDICATED MEASUREMENT REPORT	
Dedicated Measurement Termination	DEDICATED MEASUREMENT TERMINATION	
	REQUEST	
Dedicated Measurement Failure	DEDICATED MEASUREMENT FAILURE	
	INDICATION	
Downlink Power Control [FDD]	DL POWER CONTROL REQUEST	
Compressed Mode Command [FDD]	COMPRESSED MODE COMMAND	
Unblock Resource	UNBLOCK RESOURCE INDICATION	
Error Indication	ERROR INDICATION	
Downlink Power Timeslot Control [TDD]	DL POWER TIMESLOT CONTROL REQUEST	
Radio Link Pre-emption	RADIO LINK PREEMPTION REQUIRED	
	INDICATION	
Cell Synchronisation Reporting [TDD]	CELL SYNCHRONISATION REPORT	
Cell Synchronisation Termination [TDD]	CELL SYNCHRONISATION TERMINATION	
	REQUEST	
Cell Synchronisation Failure [TDD]	CELL SYNCHRONISATION FAILURE	
	INDICATION	
Information Reporting	INFORMATION REPORT	
Information Exchange Termination	INFORMATION EXCHANGE TERMINATION	
	REQUEST	
Information Exchange Failure	INFORMATION EXCHANGE FAILURE	
	INDICATION	
Bearer Re-arrangement	BEARER REARRANGEMENT INDICATION	
Radio Link Activation	RADIO LINK ACTIVATION COMMAND	
Radio Link Parameter Update	RADIO LINK PARAMETER UPDATE	
MDMO N. C. C. H. L.	INDICATION	
MBMS Notification Update	MBMS NOTIFICATION UPDATE COMMAND	
UE Status Update [FDD and 1.28 Mcps	UE STATUS UPDATE COMMAND	
TDD]		

# 8.2 NBAP Common Procedures

# 8.2.1 Common Transport Channel Setup

#### 8.2.1.1 General

This procedure is used for establishing the necessary resources in Node B, regarding Secondary CCPCH, PICH, PRACH, AICH [FDD], FACH, PCH, MICH, RACH, E-RUCCH [3.84 Mcps and 7.68 Mcps TDD], PLCCH [1.28Mcps TDD] and FPACH [1.28Mcps TDD].

# 8.2.1.2 Successful Operation

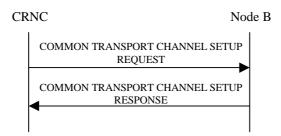


Figure 1: Common Transport Channel Setup procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

One message can configure only one of the following combinations:

- [FDD one Secondary CCPCH, and FACHs, PCH, PICH and MICH related to that Secondary CCPCH], or
- [TDD one CCTrCH consisting of Secondary CCPCHs and FACHs, PCH with the corresponding PICH and MICH related to that group of Secondary CCPCHs], or
- one [1.28Mcps TDD or more] PRACH, one RACH and one AICH [FDD] and one FPACH[1.28Mcps TDD] related to that PRACH, or
- one PLCCH [1.28Mcps TDD], or
- one E-RUCCH [3.84Mcps TDD and 7.68Mcps TDD].

#### **Secondary CCPCH:**

[FDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Secondary CCPCH* IE, the Node B shall configure and activate the indicated Secondary CCPCH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[FDD - If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the FDD S-CCPCH Frame Offset IE within the Secondary CCPCH IE, the Node B shall apply the indicated frame offset for the concerned Secondary CCPCH.]

[TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Secondary CCPCH* IE, the Node B shall configure and activate the indicated Secondary CCPCH(s) according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[3.84Mcps TDD and 7.68Mcps TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *TFCI Presence* IE, the Node B shall apply the indicated TFCI presence in the timeslot of the S-CCPCH. If all the S-CCPCHs defined in a timeslot do not have a *TFCI Presence* IE included, the Node B shall apply a TFCI field in the lowest numbered S-CCPCH of the timeslot.]

[TDD - FACHs and PCH may be mapped onto a CCTrCH which may consist of several Secondary CCPCHs]

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *FACH Parameters* IE, the Node B shall configure and activate the indicated FACH(s) according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *PCH Parameters* IE, the Node B shall configure and activate the concerned PCH and the associated PICH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[1.28Mcps TDD - If the *PCH Power* IE is included in the *PCH Parameters* IE of the COMMON TRANSPORT CHANNEL SETUP REQUEST, the Node B shall use this value as the power at which the PCH shall be transmitted.]

[TDD - If the *TSTD Indicator* IE for the S-CCPCH is included and is set to "active" in the COMMON TRANSPORT CHANNEL SETUP REQUEST, the Node B shall activate TSTD diversity for all S-CCPCHs defined in the message

that are not beacon channels [19,21]. If the *TSTD Indicator* IE is not included or is set to "not active" in the COMMON TRANSPORT CHANNEL SETUP REQUEST, the Node B shall not activate TSTD diversity for the S-CCPCHs defined in the message.]

[1.28Mcps TDD - If the *TSTD Indicator* IE for the PICH is included and is set to "active" in the COMMON TRANSPORT CHANNEL SETUP REQUEST message, the Node B shall activate TSTD diversity for the PICH if it is not a beacon channel [19,21]. If the *TSTD Indicator* IE is set to "not active" or the TSTD Indicator IE is not included for the PICH in the COMMON TRANSPORT CHANNEL SETUP REQUEST message, the Node B shall not activate TSTD diversity for the PICH.]

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *MICH Parameters* IE, the Node B shall configure and activate the concerned MICH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[FDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Modulation Power Offset* IE, in the *Secondary CCPCH* IE, the Node B shall apply the indicated modulation, and power offset in case of 16QAM, for the concerned Secondary CCPCH.]

[FDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Extended Secondary CCPCH Slot Format* IE, in the *Secondary CCPCH* IE, the Node B shall ignore the *Secondary CCPCH Slot Format* IE and apply the slot format indicated in the *Extended Secondary CCPCH Slot Format* IE.]

[3.84Mcps TDD and 7.68Mcps TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Modulation* IE, the Node B shall apply the indicated modulation for the CCTrCH.]

[3.84Mcps TDD and 7.68Mcps TDD - If a timeslot has been configured for MBSFN operation then the contents of the [3.84Mcps TDD - *Midamble Shift and Burst Type* IE] [7.68Mcps TDD - *Midamble Shift and Burst Type* 7.68Mcps IE] shall be ignored and burst type 4, Kcell=1 shall be used [19].]

[1.28 Mcps TDD - If the cell is operating in MBSFN only mode, the *MBSFN Special Time Slot LCR* IE indicates from CRNC to the Node B whether the channel is deployed on the MBSFN Special Time Slot for MBSFN only mode [19].]

[1.28Mcps TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *UARFCN* IE in the *Secondary CCPCHs* IE, this Secondary CCPCH providing MBMS service in non-MBSFN only mode shall be setup on the secondary frequency indicated by the *UARFCN* IE.]

[3.84Mcps TDD IMB - If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *IMB Parameters* IE within the *Secondary CCPCH* IE, the Node B shall apply 3.84Mcps MBSFN IMB operation.]

[3.84Mcps TDD IMB - If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Last DL Channelisation Code Number* IE within the *IMB Parameters* IE, the Node B may use the indicated range of the DL channelizationn codes in the new configuration.]

#### PRACH:

When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *PRACH* IE, the Node B shall configure and activate the indicated PRACH and the associated RACH [FDD - and the associated AICH] according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[1.28Mcps TDD - The resource indicated by the *PRACH* IE is used for RACH random access as well as E-DCH random access. The way to differentiate the two access type on PRACH physical resource shall be operated according to [21].]

[1.28Mcps TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *UARFCN* IE in the *PRACH* IE, the PRACH shall be set up on the secondary frequency indicated by the *UARFCN* IE.]

### [1.28Mcps TDD - FPACH]:

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *FPACH* IE, the Node B shall configure and activate the indicated FPACH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

Where more than one FPACH is defined, the FPACH that Node B should use is defined by the UpPCH signature  $(SYNC\_UL)$  code that the UE used. The FPACH number = N mod M where N denotes the signature number (0..7) and

M denotes the number of FPACHs that are defined in a cell. The FPACH number is in ascending order by *Common Physical Channel ID* IE contained in the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the *FPACH* IE contains the *UARFCN* IE, the FPACH shall be set up on the secondary frequency indicated by the *UARFCN* IE.

When the FPACH is set up on the secondary frequency of a multi-frequency cell, if the *PRACH LCR* IE contains the *UARFCN* IE, the *RACH* IE included in the *PRACH LCR* IE shall be ignored; otherwise all IEs included in the *PRACH LCR* IE shall be ignored.

### [1.28Mcps TDD - PLCCH]:

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *PLCCH* IE, the Node B shall configure and activate the indicated PLCCH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message when one or more of the PLCCH sequence numbers have been assigned to one or more radio links.]

### [3.84Mcps TDD and 7.68Mcps TDD - E-RUCCH]:

When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the [3.84Mcps TDD - *E-RUCCH* IE] [7.68Mcps TDD - *E-RUCCH* 7.68Mcps IE], the Node B shall configure and activate the indicated E-RUCCH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

#### RACH, FACH and PCH:

If the *TNL QoS* IE is included for a RACH, FACH or PCH and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related RACH, FACH or PCH.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Broadcast Reference* IE in the *FACH Parameters* IE, and one or more established FACH common transport channels with the same Broadcast Reference, the same Transport Format Set, the same ToAWS and the same ToAWE exist (all of them in other distinct cells within the Node B), the Node B may include the *Broadcast Common Transport Bearer Indication* IE in the *Common Transport Channel Information Response* IE in the COMMON TRANSPORT CHANNEL SETUP RESPONSE message to inform the CRNC that the existing transport bearer, identified by *Broadcast Common Transport Bearer Indication* IE, shall be used instead of establishing a new transport bearer.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Broadcast Reference* IE in the *FACH Parameters* IE and no common transport channel with the same Broadcast Reference, the same Transport Format Set, the same ToAWS and the same ToAWE exists in another cell within the Node B, or if the Node B decides to establish a new transport bearer, the Node B may store the value of *Broadcast Reference* IE.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *IP Multicast Indication* IE, and if supported, the Node B may join the indicated IP multicast group if it has not done so yet ([41] in case of IPv4, [42] in case of IPv6). If the Node B does join the IP multicast group, or is already joined to the IP multicast group as a result of a previous procedure, the Node B shall include the *IP Multicast Data Bearer Indication* IE in the COMMON TRANSPORT CHANNEL INFORMATION RESPONSE message to inform the CRNC that the existing IP multicast transport bearer, identified by *IP Multicast Indication* IE in the corresponding COMMON TRANSPORT CHANNEL SETUP REQUEST message, shall be used instead of using a IP unicast transport bearer. If the COMMON TRANSPORT CHANNEL INFORMATION RESPONSE message does not contain the *IP Multicast Data Bearer Indication* IE, the CRNC shall send FACH data frames on the IP unicast transport bearer. No matter whether the Node B has joined the indicated IP multicast group, a new transport bearer shall be established using the *Transport Layer Address* IE and *Binding ID* IE and FACH specific control frames, e.g. TIMING ADJUSTMENT, shall be sent on the established Iub transport bearer.

#### General:

After successfully configuring the requested common transport channels and the common physical channels, the Node B shall store the value of *Configuration Generation ID* IE and it shall respond with the COMMON TRANSPORT CHANNEL SETUP RESPONSE message with the *Common Transport Channel ID* IE, the *Binding ID* IE (if no *Broadcast Common Transport Bearer Indication* IE is included) and the *Transport Layer Address* IE (if no *Broadcast Common Transport Bearer Indication* IE is included) for the configured common transport channels.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes the *Transport Layer Address* and *Binding ID* IEs, the Node B may use the transport layer adress and the binding identifier received from the CRNC when establishing a transport bearer for the indicated common transport channels.

After a successful procedure and once the transport bearers are established, the configured common transport channels and the common physical channels shall adopt the state Enabled [6] in the Node B and the common physical channels exist on the Uu interface.

### 8.2.1.3 Unsuccessful Operation

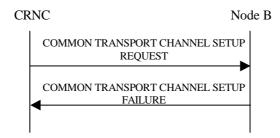


Figure 2: Common Transport Channel Setup procedure, Unsuccessful Operation

If the Node B is not able to support all or part of the configuration, it shall reject the configuration of all the channels in the COMMON TRANSPORT CHANNEL SETUP REQUEST message. The channels in the COMMON TRANSPORT CHANNEL SETUP REQUEST message shall remain in the same state as prior to the procedure. The *Cause* IE shall be set to an appropriate value. The value of *Configuration Generation ID* IE from the COMMON TRANSPORT CHANNEL SETUP REQUEST message shall not be stored.

If the configuration was unsuccessful, the Node B shall respond with a COMMON TRANSPORT CHANNEL SETUP FAILURE message.

Typical cause values are as follows:

#### **Radio Network Layer Cause:**

- Cell not available
- Power level not supported
- Node B Resources unavailable
- Requested Tx Diversity Mode not supported
- UL SF not supported
- DL SF not supported
- Common Transport Channel Type not supported
- MICH not supported

## **Transport Layer Cause:**

- Transport Resources Unavailable

### **Miscellaneous Cause:**

- O&M Intervention
- Control processing overload
- HW failure

### 8.2.1.4 Abnormal Conditions

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Secondary CCPCH* IE, and that IE contains [FDD - neither the *FACH Parameters* IE nor the *PCH Parameters* IE] [TDD - neither the *FACH* IE nor the *PCH* IE], the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.

[TDD - If the FACH CCTrCH Id IE or the PCH CCTrCH Id IE does not equal the SCCPCH CCTrCH Id IE, the Node B shall regard the Common Transport Channel Setup procedure as having failed and the Node B shall send the COMMON TRANSPORT CHANNEL SETUP FAILURE message to the CRNC.]

[TDD - If the *TDD Physical Channel Offset* IE, the *Repetition Period* IE, and the *Repetition Length* IE are not equal for each SCCPCH configured within the CCTrCH or the *TFCI Presence* IE are not equal for any two SCCPCHs configured in the same timeslot, the Node B shall regard the Common Transport Channel Setup procedure as having failed and the Node B shall send the COMMON TRANSPORT CHANNEL SETUP FAILURE message to the CRNC.]

[1.28Mcps TDD - If the *Common Transport Channel ID* IE, and the *Transport Format Set* IE are not equal for each RACH configured in PRACH, the Node B shall regard the Common Transport Channel Setup procedure as having failed and the Node B shall send the COMMON TRANSPORT CHANNEL SETUP FAILURE message to the CRNC.]

[1.28Mcps TDD - If the *UARFCN* IE in the *PRACH LCR* IE is not equal to the *UARFCN* IE in any other *PRACH LCR* IE configured on one RACH, or if the *UARFCN* IE in *PRACH LCR* IE is not equal to the *UARFCN* IE in *FPACH* IE, the Node B shall regard the Common Transport Channel Setup procedure as having failed and the Node B shall send the COMMON TRANSPORT CHANNEL SETUP FAILURE message to the CRNC.]

If the state is already Enabled or Disabled [6] for at least one channel in the COMMON TRANSPORT CHANNEL SETUP REQUEST message which is received, the Node B shall reject the configuration of all channels with the *Cause* IE set to "Message not compatible with receiver state".

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport channel intended to be established, the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *MICH Parameters* IE but not the *FACH Parameters* IE [FDD - for one S-CCPCH], the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a *Broadcast Reference* IE value already associated to an existing FACH in the same cell, or if the message contains the same value for the *Broadcast Reference* IEs included in the *FACH Parameters* IEs for several FACHs in the list of FACHs defined on the Secondary CCPCH, the Node B shall reject the procedure, using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains both the *Broadcast Reference* IE and the *IP Multicast Indication* IE, the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.

[3.84Mcps TDD IMB - If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *IMB Parameters* IE that includes the *Last DL Channelisation Code Number* IE and if the Secondary CCPCH Slot Format IE is set to "1", then the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.]

If ALCAP is not used, if the COMMON TRANSPORT CHANNEL SETUP REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE in the *FACH Parameters* IE, *PCH Parameters* IE and/or [FDD-RACH Parameters][TDD - RACH] IE, then the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.

# 8.2.2 Common Transport Channel Reconfiguration

### 8.2.2.1 General

This procedure is used for reconfiguring common transport channels and/or common physical channels, while they still might be in operation.

# 8.2.2.2 Successful Operation

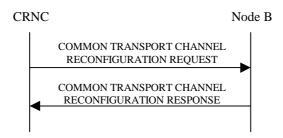


Figure 3: Common Transport Channel Reconfiguration, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

One message can configure only one of the following combinations:

- [FDD FACHs, one PCH, one PICH and/or one MICH related to one Secondary CCPCH], or
- [TDD one CCTrCH consisting of Secondary CCPCHs and FACHs, PCH with the corresponding PICH and MICH related to that group of Secondary CCPCHs], or
- one RACH and/or one AICH[FDD] and/or one FPACH[1.28Mcps TDD] related to one PRACH,or
- [1.28Mcps TDD One UpPCH].

#### SCCPCH:

[TDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *SCCPCH Power* IE, the Node B shall reconfigure the maximum power that the indicated S-CCPCH shall use.]

### FACH:

If the FACH Parameters IE is present, the Node B shall reconfigure the indicated FACH(s).

[FDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FACH Power* IE, the Node B shall reconfigure the maximum power that the indicated FACH may use.]

[1.28Mcps TDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FACH Power* IE, the Node B shall reconfigure the maximum power that the indicated FACH may use.]

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWS* IE, the Node B shall reconfigure the time of arrival window startpoint that the indicated FACH shall use. In case a transport bearer is used by several FACH channels in different cells, the reconfiguration of the time of arrival window startpoint requested in one cell shall be applied to all these FACH channels.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWE* IE, the Node B shall reconfigure the time of arrival window endpoint that the indicated FACH shall use. In case a transport bearer is used by several FACH channels in different cells, the reconfiguration of the time of arrival window endpoint requested in one cell shall be applied to all these FACH channels.

If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related FACH.

### PCH:

If the PCH Parameters IE is present, the Node B shall reconfigure the indicated PCH.

[FDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PCH Power* IE, the Node B shall reconfigure the power that the PCH shall use.]

[1.28Mcps TDD - If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PCH Power* IE, the Node B shall reconfigure the power that the PCH shall use.]

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWS* IE, the Node B shall reconfigure the time of arrival window startpoint that the PCH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWE* IE, the Node B shall reconfigure the time of arrival window endpoint that the PCH shall use.

If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related PCH.

#### PICH:

If the PICH Parameters IE is present, the Node B shall reconfigure the indicated PICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PICH Power* IE, the Node B shall reconfigure the power that the PICH shall use.

#### MICH:

If the MICH Parameters IE is present, the Node B shall reconfigure the MICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *MICH Power* IE, the Node B shall reconfigure the power that the MICH shall use.

#### [FDD - PRACH]:

If the PRACH Parameters IE is present, the Node B shall reconfigure the indicated PRACH(s).

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Preamble Signatures* IE, the Node B shall reconfigure the preamble signatures that the indicated PRACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Allowed Slot Format Information* IE, the Node B shall reconfigure the slot formats that the indicated PRACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *RACH Sub Channel Numbers* IE, the Node B shall reconfigure the sub channel numbers that the indicated PRACH shall use.

If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related RACH.

### [FDD - AICH]:

If the AICH Parameters IE is present, the Node B shall reconfigure the indicated AICH(s).

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *AICH Power* IE, the Node B shall reconfigure the power that the indicated AICH shall use.

### [1.28Mcps TDD - FPACH]:

If the FPACH Parameters IE is included, the Node B shall reconfigure the indicated FPACH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FPACH Power* IE, the Node B shall reconfigure the power that the FPACH shall use.

### [1.28Mcps TDD - UpPCH]:

If the UpPCH Parameters IE is included, the Node B shall reconfigure the position of the UpPCH.

For a multi-frequency cell:

- If the *UpPCH Position LCR* IE and the *UARFCN* IE are included, and the indicated frequency is primary frequency, the Node B shall reconfigure the position of the UpPCH on the primary frequency.
- If the *UpPCH Position LCR* IE and the *UARFCN* IE are included, and the indicated frequency is a secondary frequency, the Node B shall configure or reconfigure the position of the UpPCH on the secondary frequency.
- If the *UpPCH Position LCR* IE is not included, the Node B may delete the UpPCH on the secondary frequency indicated by the *UARFCN* IE.

### [1.28Mcps TDD - PLCCH]:

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max PLCCH Power* IE, the Node B shall reconfigure the power that the PLCCH shall use.

#### General.

After a successful procedure, the channels will have adopted the new configuration in the Node B. The channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall remain in the same state as prior to the procedure. The Node B shall store the value of *Configuration Generation ID* IE and the Node B shall respond with the COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE message.

# 8.2.2.3 Unsuccessful Operation

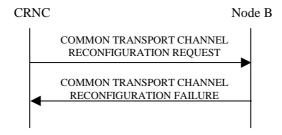


Figure 4: Common Transport Channel Reconfiguration procedure, Unsuccessful Operation

If the Node B is not able to support all or part of the configuration, it shall reject the configuration of all the channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message. The channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall remain in the same state as prior to the procedure. The *Cause* IE shall be set to an appropriate value. The value of *Configuration Generation ID* IE from the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall not be stored.

If the configuration was unsuccessful, the Node B shall respond with the COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE message.

Typical cause values are as follows:

#### **Radio Network Layer Cause:**

- Cell not available
- Power level not supported
- Node B Resources unavailable

#### **Transport Layer Cause:**

- Transport Resources Unavailable

### **Miscellaneous Cause:**

- O&M Intervention
- Control processing overload
- HW failure

### 8.2.2.4 Abnormal Conditions

[1.28Mcps TDD - For a single frequency cell, if the *UpPCH Parameters* IE is included in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message but the *UpPCH Position LCR* IE is not present, the Node B shall reject the procedure by sending a COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE message.]

[1.28Mcps TDD - For a single frequency cell, if the *UARFCN* IE is included in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message, the Node B shall reject the procedure by sending a COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE message.]

[1.28Mcps TDD - For a multi-frequency cell, if the *UpPCH Parameters* IE is included in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message but the *UpPCH Position LCR* IE is not present, and the frequency indicated by the *UARFCN* IE is primary frequency, the Node B shall reject the procedure by sending a COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE message.]

[1.28Mcps TDD - For a multi-frequency cell, if the *UpPCH Parameters* IE is included in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message but the *UpPCH Position LCR* IE is not present, and the frequency indicated by the *UARFCN* IE is secondary frequency on which the UpPCH is not configured, the Node B shall reject the procedure by sending a COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE message.]

# 8.2.3 Common Transport Channel Deletion

### 8.2.3.1 General

This procedure is used for deleting common physical channels and common transport channels.

### 8.2.3.2 Successful Operation

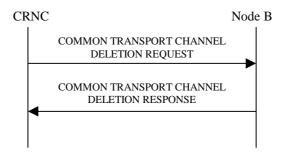


Figure 5: Common Transport Channel Deletion procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL DELETION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

### **Secondary CCPCH:**

If the *Common Physical Channel ID* IE or *Common Physical Channel ID 7.68Mcps* IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates a Secondary CCPCH, the Node B shall delete the indicated channel and the FACHs and PCH supported by that Secondary CCPCH. If there is a PCH that is deleted, the PICH associated with that PCH shall also be deleted. If an S-CCPCH is deleted, the MICH associated with that S-CCPCH shall also be deleted.

If the *Common Physical Channel ID* IE or *Common Physical Channel ID 7.68Mcps* IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates a common transport channel that is sharing a common transport bearer with other one or several common transport channels, the Node B shall delete the indicated channel but keep the common transport bearer which is shared by the remaining common transport channel(s).

If the *Common Physical Channel ID* IE or *Common Physical Channel ID* 7.68Mcps IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates a common transport channel which is using an IP multicast transport bearer, the Node B shall leave the IP multicast group if this channel is the last one in the group ([41] in case of IPv4, [42] in case of IPv6).

#### PRACH:

If the *Common Physical Channel ID* IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates a PRACH, the Node B shall delete the indicated channel and the RACH supported by the PRACH. [FDD - The AICH associated with the RACH shall also be deleted.]

### [1.28Mcps TDD PLCCH:

If the *Common Physical Channel ID* IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates a PLCCH, the Node B shall delete the indicated channel.]

#### General:

[TDD - If the requested common physical channel is a part of a CCTrCH, all common transport channels and all common physical channels associated with this CCTrCH shall be deleted.]

After a successful procedure, the channels are deleted in the Node B. The channels in the COMMON TRANSPORT CHANNEL DELETION REQUEST message shall be set to state Not Existing ref. [6]. The Node B shall store the received value of the *Configuration Generation ID* IE and respond with the COMMON TRANSPORT CHANNEL DELETION RESPONSE message.

### 8.2.3.3 Unsuccessful Operation

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#### 8.2.3.4 Abnormal Conditions

If the C-ID in the COMMON TRANSPORT CHANNEL DELETION REQUEST message is not existing in the Node B or the Common Physical Channel ID does not exist in the Cell, the Node B shall respond with the COMMON TRANSPORT CHANNEL DELETION RESPONSE message.

### 8.2.4 Block Resource

#### 8.2.4.1 General

The Node B initiates this procedure to request the CRNC to prohibit the usage of the specified logical resources.

The logical resource that can be blocked is a cell.

### 8.2.4.2 Successful Operation

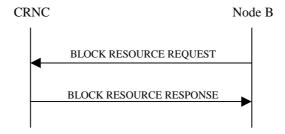


Figure 6: Block Resource procedure, Successful Operation

The procedure is initiated with a BLOCK RESOURCE REQUEST message sent from the Node B to the CRNC using the Node B Control Port.

Upon reception of the BLOCK RESOURCE REQUEST message, the CRNC shall prohibit the use of the indicated logical resources according to the *Blocking Priority Indicator* IE.

If the *Blocking Priority Indicator* IE in the BLOCK RESOURCE REQUEST message indicates "High Priority", the CRNC shall prohibit the use of the logical resources immediately.

If the *Blocking Priority Indicator* IE in the BLOCK RESOURCE REQUEST message indicates "Normal Priority", the CRNC shall prohibit the use of the logical resources if the resources are idle or immediately upon expiry of the shutdown timer specified by the *Shutdown Timer* IE in the BLOCK RESOURCE REQUEST message. New traffic shall not be allowed to use the logical resources while the CRNC waits for the resources to become idle and once the resources are blocked.

If the *Blocking Priority Indicator* IE in the BLOCK RESOURCE REQUEST message indicates "Low Priority", the CRNC shall prohibit the use of the logical resources when the resources become idle. New traffic shall not be allowed to use the logical resources while the CRNC waits for the resources to become idle and once the resources are blocked.

If the resources are successfully blocked, the CRNC shall respond with a BLOCK RESOURCE RESPONSE message. Upon reception of the BLOCK RESOURCE RESPONSE message, the Node B may disable [3.84Mcps TDD - SCH], [FDD - the Primary SCH, the Secondary SCH, the Primary CPICH, if present the Secondary CPICH(s)], [1.28Mcps TDD - DwPCH] and the Primary CCPCH. The other logical resources in the cell shall be considered as blocked.

Reconfiguration of logical resources and change of System Information can be done, even when the logical resources are blocked.

#### **Interactions with the Unblock Resource procedure:**

If the UNBLOCK RESOURCE INDICATION message is received by the CRNC while a Block Resource procedure on the same logical resources is in progress, the CRNC shall cancel the Block Resource procedure and proceed with the Unblock Resource procedure.

If the BLOCK RESOURCE RESPONSE message or the BLOCK RESOURCE FAILURE message is received by the Node B after the Node B has initiated an Unblock Resource procedure on the same logical resources as the ongoing Block Resource procedure, the Node B shall ignore the response to the Block Resource procedure.

### 8.2.4.3 Unsuccessful Operation

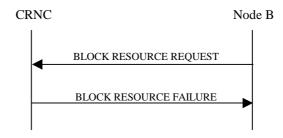


Figure 7: Block Resource procedure, Unsuccessful Operation

The CRNC may reject the request to block the logical resources, in which case the logical resources will remain unaffected and the CRNC shall respond to the Node B with the BLOCK RESOURCE FAILURE message. Upon reception of the BLOCK RESOURCE FAILURE message, the Node B shall leave the logical resources in the state that they were in prior to the start of the Block Resource procedure.

Typical cause values are as follows:

### **Miscellaneous Cause:**

- O&M Intervention
- Control processing overload
- HW failure

#### **Radio Network Layer Cause:**

- Priority transport channel established

### 8.2.4.4 Abnormal Conditions

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### 8.2.5 Unblock Resource

### 8.2.5.1 General

The Node B initiates this procedure to indicate to the CRNC that logical resources are now unblocked.

The logical resource that can be unblocked is a cell.

### 8.2.5.2 Successful Operation



Figure 8: Unblock Resource procedure, Successful Operation

The procedure is initiated with an UNBLOCK RESOURCE INDICATION message sent from the Node B to the CRNC using the Node B Control Port. The Node B shall enable [3.84Mcps TDD - SCH], [FDD - the Primary SCH, the Secondary SCH, the Primary CPICH, the Secondary CPICH(s) (if present)], [1.28Mcps TDD - DwPCH] and the Primary CCPCH that had been disabled due to the preceding Block Resource procedure before sending the UNBLOCK RESOURCE INDICATION message. Upon reception of the UNBLOCK RESOURCE INDICATION message, the CRNC may permit the use of the logical resources.

All physical channels and transport channels associated to the cell that is unblocked are also unblocked.

### 8.2.5.3 Abnormal Conditions

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# 8.2.6 Audit Required

### 8.2.6.1 General

The Node B initiates this procedure to request the CRNC to perform an audit of the logical resources at the Node B. This procedure is used to indicate a possible misalignment of state or configuration information.

### 8.2.6.2 Successful Operation



Figure 9: Audit Required procedure, Successful Operation

The procedure is initiated with an AUDIT REQUIRED INDICATION message sent from the Node B to the CRNC using the Node B Control Port.

If the Node B cannot ensure alignment of the state or configuration information, it should initiate the Audit Required procedure.

Upon receipt of the AUDIT REQUIRED INDICATION message, the CRNC should initiate the Audit procedure.

### 8.2.6.3 Abnormal Conditions

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### 8.2.7 Audit

#### 8.2.7.1 General

This procedure is executed by the CRNC to perform an audit of the configuration and status of the logical resources in the Node B. A complete audit of a Node B is performed by one or more Audit procedures, together performing an audit sequence. The audit may cause the CRNC to re-synchronise the Node B to the status of logical resources known by the CRNC, that the Node B can support.

## 8.2.7.2 Successful Operation



Figure 10: Audit procedure, Successful Operation

The procedure is initiated with an AUDIT REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

If the *Start Of Audit Sequence Indicator* IE in the AUDIT REQUEST message is set to "start of audit sequence" a new audit sequence is started, any ongoing audit sequence shall be aborted and the Node B shall provide (part of the) audit information. If the *Start Of Audit Sequence Indicator* IE is set to "not start of audit sequence", the Node B shall provide (part of) the remaining audit information not already provided during this audit sequence.

If the information provided in the AUDIT RESPONSE message completes the audit sequence, the Node B shall set the *End Of Audit Sequence Indicator* IE in the AUDIT RESPONSE message to "End of Audit Sequence". If not all audit information has been provided yet as part of the ongoing audit sequence, the Node B shall set the *End Of Audit Sequence Indicator* IE in the AUDIT RESPONSE message to "Not End of Audit Sequence".

#### **Information Provided In One Audit Sequence:**

The Node B shall include one *Local Cell Information* IE for each local cell present in the Node B. The Node B shall include the *Maximum DL Power Capability* IE, the *Minimum Spreading Factor* IE and the *Minimum DL Power Capability* IE when any of those values are known by the Node B. The Node B shall include the *HSDPA Capability* IE set to "HSDPA Capable" and may include *HS-DSCH MAC-d PDU Size Capability* IE for every HSDPA-capable Local Cell. The Node B shall include the *E-DCH Capability* IE set to "E-DCH Capable" and may include *E-DCH MAC-d PDU Size Capability* IE for every E-DCH-capable Local Cell. The Node B shall include the *MBMS Capability* IE set to "MBMS Capable" for every MBMS-capable Local Cell. [FDD - The Node B shall include the *F-DPCH Capability* IE set to "F-DPCH Capable" for every F-DPCH-capable Local Cell.] [FDD - The Node B shall include the *Continuous Packet Connectivity DTX-DRX Capability* IE set to "Continuous Packet Connectivity DTX-DRX Capable" when Continuous Packet Connectivity HS-SCCH less Capability IE set to "Continuous Packet Connectivity HS-SCCH less Capability IE set to "Continuous Packet Connectivity HS-SCCH less is supported for every Local Cell that is both HSDPA-capable and E-DCH-capable.] [FDD - The Node B shall include the

MIMO Capability IE set to "MIMO Capable" for every MIMO-capable Local Cell.] [FDD - The Node B shall include the SixtyfourQAM DL Capability IE set to "SixtyfourQAM DL Capable" for every SixtyfourQAM DL-capable Local Cell.] [FDD - The Node B shall include the Enhanced FACH Capability IE set to "Enhanced FACH Capable" for every Enhanced FACH-capable Local Cell.] [FDD - The Node B shall include the SixteenQAM UL Capability IE set to "SixteenQAM UL Capable" for every SixteenQAM UL-capable Local Cell.] [1.28Mcps TDD - The Node B shall include the MBSFN Only Mode Capability IE set to "MBSFN Only Mode Capable" for every MBSFN Only Modecapable Local Cell.] [FDD - The Node B shall include the F-DPCH Slot Format Capability IE set to "F-DPCH Slot Format Capable" for every F-DPCH Slot Format-capable Local Cell. [1.28Mcps TDD - The Node B shall include the SixtyfourQAM DL Capable IE set to "SixtyfourQAM DL Capable" for every SixtyfourQAM DL-capable Local Cell.] [FDD - The Node B shall include the Common E-DCH Capability IE set to "Common E-DCH Capable" for every Common E-DCH capable Local Cell.] The Node B shall include the E-DPCCH Power Boosting Capability IE set to "E-DPCCH Power Boosting Capable " for every E-DPCCH Power Boosting -capable Local Cell. [FDD - The Node B shall include the SixtyfourQAM DL and MIMO Combined Capability IE set to "SixtyfourQAM DL and MIMO Combined Capable" when Combined SixtyfourQAM DL and MIMO is supported for every Local Cell that is both SixtyfourQAM DL-capable and MIMO-capable.][1.28Mcps TDD - The Node B shall include the Enhanced FACH Capability IE set to "Enhanced FACH Capable" for every Enhanced FACH-capable Local Cell.] [1.28Mcps TDD - The Node B shall include the Enhanced PCH Capability IE set to "Enhanced PCH Capable" for every Enhanced PCHcapable Local Cell.] [1.28Mcps TDD - The Node B shall include the Enhanced UE DRX Capability LCR IE set to " Enhanced UE DRX Capable " for every Enhanced UE DRX Capable Local Cell.] [FDD - The Node B shall include the Multi Cell Capability Info IE and set the Multi Cell Capability IE value to "Multi Cell Capable" for every Multi Cell operation capable Local Cell, and if the cell can be the serving HS-DSCH then the possible cells (same sector) that can act as secondary serving HS-DSCH shall be listed in the Possible Secondary Serving Cell List IE.] [1.28Mcps TDD -The Node B shall include the Semi-Persistent scheduling Capability LCR IE set to "Semi-Persistent scheduling Capable" for every semi-persistent scheduling Capable Local Cell.] [1.28Mcps TDD - The Node B shall include the Continuous Packet Connectivity DRX Capability LCR IE set to "Continuous Packet Connectivity DRX Capability Capable" for Continuous Packet Connectivity DRX Capability Capable Local Cell.] [1.28Mcps TDD- The Node B shall include the MIMO Capability IE set to "MIMO Capable" for every MIMO-capable Local Cell.] [1.28Mcps TDD- The Node B shall include the SixtyfourQAM DL and MIMO Combined Capability IE set to "SixtyfourQAM DL and MIMO Combined Capable" when Combined SixtyfourQAM DL and MIMO is supported for every Local Cell that is both SixtyfourQAM DL-capable and MIMO-capable.] [FDD - The Node B shall include the Enhanced UE DRX Capability IE set to "Enhanced UE DRX Capable" for every Enhanced UE DRX capable Local Cell.] [FDD - The Node B shall include the MIMO Power Offset For S-CPICH Capability IE set to "S-CPICH Power Offset Capable " for every MIMO-capable Local Cell able to transmit S-CPICH at a power offset from P-CPICH.] [FDD - The Node B shall include the TX Diversity on DL Control Channels by MIMO UE Capability IE set to "DL Control Channel Tx Diversity for MIMO UE with non-diverse P-CPICH Capable" for every MIMO-capable Local Cell able to support DL control channels in transmit diversity for MIMO UEs when when MIMO is active and P-CPICH is not transmitted in diversity mode [7].] [FDD - The Node B shall include the Cell Capability Container IE if the Local Cell is capable of at least one feature listed in 9.2.2.122 and indicate the capabilities listed in 9.2.2.122 for the local cell.] [FDD - For every MIMOcapable Local Cell the Node B may include the Precoding Weight Set Restriction IE set to "Preferred", if configuration of the precoding weight set restriction defined in [18] is preferred.]

[TDD - The Node B shall include the *Reference Clock Availability* IE to indicate the availability of a Reference clock connected to the Local Cell.]

If the Node B internal resources are pooled for a group of cells, the Node B shall include one *Local Cell Group Information* IE containing the Node B internal resource capacity and the consumption laws per group of cells [FDD - , including also the *E-DCH Capacity consumption Law* IE, if E-DCH is supported] [TDD - , including also the *E-DCH TDD Capacity Consumption Law* IE, if E-DCH is supported]. If the *UL Capacity Credit* IE is not present in the *Local Cell Group Information* IE, then the internal resource capabilities of the Node B for the Local Cell Group are modelled as shared resources between Uplink and Downlink.

If the Node B internal power resources are pooled for a group of Local Cells, the Node B shall include one *Power Local Cell Group Information* IE containing the Maximum DL Power Capability for each Power Local Cell Group for which this value is known by the Node B. In this case, the Node B shall also include the *Maximum DL Power Capability* IE in the *Local Cell Information* IE for all the Local Cells belonging to a Power Local Cell Group reported in the *Power Local Cell Group Information* IE. Furthermore, the sum of the Maximum DL Power Capability of all the Local Cells belonging to the same Power Local Cell Group shall not exceed the Maximum DL Power Capability of the concerned Power Local Cell Group.

The Node B shall include, for each local cell present in the Node B, the Node B internal resource capability and consumption laws within the *Local Cell Information* IE [FDD - , including also the *E-DCH CapacityCconsumption Law*, if E-DCH is supported] [TDD - , including also the *E-DCH TDD Capacity Consumption Law* IE, if E-DCH is supported]. If the *UL Capacity Credit* IE is not present in the *Local Cell Information* IE, then the internal resource

capabilities of the local cell are modelled as shared resources between Uplink and Downlink. If the Local Cell utilises Node B internal resource capabilities that are pooled for several Local Cell(s), the *Local Cell Group ID* IE shall contain the identity of the used Local Cell Group. If the Local Cell utilises Node B internal power resources that are pooled for several Local Cells, the *Power Local Cell Group ID* IE shall contain the identity of the concerned Power Local Cell Group.

The Node B shall include one *Cell Information* IE for each cell in the Node B and information about all common transport channels and all common physical channels for each cell. If a *Configuration Generation ID* IE for a cell can not be trusted, the Node B shall set this *Configuration Generation ID* IE = "0". The Node B shall include the *HS-DSCH Resources Information* IE for every Cell which has been configured with HS-DSCH resources. [FDD - The Node B shall include the *E-DCH Resources Information* IE for every Cell which has been configured with E-DCH resources.] [TDD - The Node B shall include the *E-DCH Resources Information* IE and the [3.84Mcps TDD - *E-RUCCH Information* IE] [7.68Mcps TDD - *E-RUCCH Information* 7.68Mcps IE] for every cell which has been configured with E-DCH resources.]

[1.28Mcps TDD - The Node B may include the *UpPCH Information LCR* IE for each frequency on which the UpPCH channel is not configured in the timeslot of UpPTS.]

[1.28Mcps TDD - For a multi-frequency cell, the Node B may include the *UARFCN* IE in the *HS-DSCH Resources Information* IE to report the status of the HS-DSCH resources on the indicated frequency, the Node B may also not include any *UARFCN* IE in the *HS-DSCH Resources Information* IE to report the status of the HS-DSCH resources for the whole cell.]

[1.28Mcps TDD - For a multi-frequency cell, the Node B may include the *UARFCN* IE in the *E-DCH Resources Information* IE to report the status of the E-DCH resources on the indicated frequency, the Node B may also not include any *UARFCN* IE in the *E-DCH Resources Information* IE to report the status of the E-DCH resources for the whole cell.]

The Node B shall also include one *Communication Control Port Information* IE for each Communication Control Port in the Node B.

[1.28Mcps TDD - For a multi-frequency cell, the Node B should report the status of the resources used for each frequency. A reporting method can be found in Annex E.]

### 8.2.7.3 Unsuccessful Operation



Figure 10A: Audit procedure, Unsuccessful Operation

If the Node B cannot perform an audit of the configuration and status of the logical resources, it shall send a AUDIT FAILURE message with the *Cause* IE set to an appropriate value.

### 8.2.7.4 Abnormal Conditions

If the Node B receives the AUDIT REQUEST message with the *Start Of Audit Sequence Indicator* IE set to "not start of audit sequence" and there is no ongoing audit sequence, the Node B shall send the AUDIT FAILURE message with the appropriate cause value.

### 8.2.8 Common Measurement Initiation

#### 8.2.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on common resources in a Node B.

## 8.2.8.2 Successful Operation

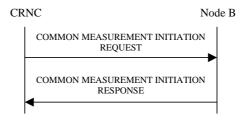


Figure 11: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

[TDD - If the [3.84Mcps TDD and 7.68Mcps TDD - *Time Slot* IE] [1.28Mcps TDD - *Time Slot LCR* IE] is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to the requested time slot individually.]

[1.28Mcps TDD - If *Time Slot LCR* IE is not present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to all the available time slots in the frequency.]

[1.28Mcps TDD - If *UARFCN* IE is not present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to all the frequencies in the cell.] [1.28Mcps TDD - If neither *UARFCN* IE nor *Time Slot LCR* IE is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to all time slots in all frequencies in which the measurements are applicable and the *Additional Time Slot LCR* IE should be ignored.]

[1.28Mcps TDD - If *Additional Time Slot LCR* IE is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to the requested additional time slots indicated in the *Additional Time Slot LCR* IE.]

[1.28Mcps TDD - If the *UpPCH Position LCR* IE is present in the COMMON MEASUREMENT INITIATION REQUEST message, and the *Common Measurement Type* IE is set to "UpPCH interference", the measurement request shall apply to the requested UpPCH position individually.]

If the *Common Measurement Type* IE is not set to "SFN-SFN Observed Time Difference" and the *SFN Reporting Indicator* IE is set to "FN Reporting Required", the *SFN* IE shall be included in the COMMON MEASUREMENT REPORT message or in the COMMON MEASUREMENT RESPONSE message, the latter only in the case the *Report Characteristics* IE is set to "On Demand". The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25]. If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", the *SFN Reporting Indicator* IE shall be ignored.

[FDD - If the *Common Measurement Type* IE is set to "Received Scheduled E-DCH Power Share" and the *RTWP\* Reporting Indicator* IE is set to "RTWP\* Reporting Required", the *RTWP\* Value* IE shall be included in the COMMON MEASUREMENT REPORT message or in the COMMON MEASUREMENT RESPONSE message, the latter only in the case the *Report Characteristics* IE is set to "On Demand". This is the received total wideband power (RTWP) determined for the same time period during which RSEPS is determined.]

[FDD - If the Common Measurement Type IE is set to "Received Scheduled E-DCH Power Share for Cell Portion" and the RTWP\*for Cell Portion Reporting Indicator IE is set to "RTWP\* Reporting Required", the RTWP\* Value IE shall

be included in the COMMON MEASUREMENT REPORT message or in the COMMON MEASUREMENT RESPONSE message, the latter only in the case the *Report Characteristics* IE is set to "On Demand".]

[1.28Mcps TDD - For a multi-frequency cell, if *Common Measurement Type* IE is set to "HS-DSCH Provided Bit Rate", and the *UARFCN* IE is included in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to the indicated frequency, if *Common Measurement Type* IE is set to "HS-DSCH Provided Bit Rate", and the *UARFCN* IE is not included in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to the whole cell.]

#### Common measurement type:

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the Node B shall initiate the SFN-SFN Observed Time Difference measurements between the reference cell identified by *C-ID* IE and the neighbouring cells identified by the *UTRAN Cell Identifier(UC-Id)* IE in the *Neighbouring Cell Measurement Information* IE.

If the *Common Measurement Type* IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning", then the Node B shall initiate the UTRAN GANSS Timing of Cell Frames measurements using the GNSS system time identified by *GANSS Time ID* IE included in the COMMON MEASUREMENT INITIATION REQUEST message.

- If the *Common Measurement Type* IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning" and the *GANSS Time ID* IE is not included in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall assume that the corresponding GANSS time is "Galileo" system time.

[FDD - If the *Common Measurement Type* IE is set to "Received Total Wide Band Power for Cell Portion", "Transmitted Carrier Power for Cell Portion", "Transmitted carrier power of all codes not used for HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH transmission for Cell Portion", "HS-DSCH Required Power for Cell Portion", "HS-DSCH Provided Bit Rate for Cell Portion" or "Received Scheduled E-DCH Power Share for Cell Portion", the Node B shall initiate the corresponding measurements for all the cell portions which are configured under the cell indicated by *C-ID* IE in the COMMON MEASUREMENT INITIATION REQUEST message.]

#### **Report characteristics:**

The Report Characteristics IE indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to "On Demand" and if the *SFN* IE is not provided, the Node B shall return the result of the requested measurement immediately. If the *SFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to "Periodic", the Node B shall periodically initiate a Common Measurement Reporting procedure for this measurement, with the requested report frequency. If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", all the available measurement results shall be reported in the *Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement Value Information* IE and the Node B shall indicate in the *Unsuccessful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE all the remaining neighbouring cells with no measurement result available in the Common Measurement Reporting procedure. If the *SFN* IE is provided, it indicates the frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to "Event A", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero for the hysteresis time. If the *Common Measurement Type* IE is set to "HS-DSCH Required Power", the measured entity to be considered is the sum of the HS-DSCH Required Power measurements for each priority class. [FDD - If the *Common Measurement Type* IE is set to "Received Total Wide Band Power for Cell Portion" or "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH transmission for Cell Portion" or "HS-DSCH Required Power for Cell Portion" or "Received Scheduled E-DCH Power Share for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.]

If the *Report Characteristics* IE is set to "Event B", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero for the hysteresis time. If the *Common Measurement Type* IE is set to "HS-DSCH Required Power", the measured entity to be considered is the

sum of the HS-DSCH Required Power measurements for each priority class. [FDD - If the *Common Measurement Type* IE is set to "Received Total Wide Band Power for Cell Portion" or "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH transmission for Cell Portion" or "HS-DSCH Required Power for Cell Portion" or "Received Scheduled E-DCH Power Share for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.]

If the *Report Characteristics* IE is set to "Event C", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising time specified by the *Measurement Change Time* IE has elapsed since the previous event reporting. [FDD - If the *Common Measurement Type* IE is set to "Received Total Wide Band Power for Cell Portion" or "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH transmission for Cell Portion" or "Received Scheduled E-DCH Power Share for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.]

If the *Report Characteristics* IE is set to "Event D", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the falling time specified by the *Measurement Change Time* IE has elapsed since the previous event reporting. [FDD - If the *Common Measurement Type* IE is set to "Received Total Wide Band Power for Cell Portion" or "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH transmission for Cell Portion" or "Received Scheduled E-DCH Power Share for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.]

If the Report Characteristics IE is set to "Event E", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the Report Periodicity IE is provided, the Node B shall initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminate any corresponding periodic reporting. If the Measurement Threshold 2 IE is not present, the Node B shall use the value of the Measurement Threshold 1 IE instead. If the Measurement Hysteresis Time IE is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B. If the Common Measurement Type IE is set to "HS-DSCH Required Power", the measured entity to be considered is the sum of the HS-DSCH Required Power measurements for each priority class. [FDD - If the Common Measurement Type IE is set to "Received Total Wide Band Power for Cell Portion" or "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH transmission for Cell Portion" or "HS-DSCH Required Power for Cell Portion" or "Received Scheduled E-DCH Power Share for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.]

If the *Report Characteristics* IE is set to "Event F", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the Node B shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B. If the *Common Measurement Type* IE is set to "HS-DSCH Required Power", the measured entity to be considered is the sum of the HS-DSCH Required Power measurements for each priority class. [FDD - If the *Common Measurement Type* IE is set to "Received Total Wide Band Power for Cell Portion" or "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH transmission for Cell Portion" or "HS-DSCH Required Power for Cell Portion" or "Received Scheduled E-DCH Power Share for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.]

If the *Report Characteristics* IE is set to "On Modification" and if the *SFN* IE is not provided, the Node B shall report the result of the requested measurement immediately. If the *SFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25]. Then, the Node B shall initiate the Common Measurement Reporting procedure in accordance to the following conditions:

- 1. If the Common Measurement Type IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning":
  - If the TUTRAN-GPS Change Limit IE is included in the TUTRAN-GPS Measurement Threshold Information IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of TUTRAN-GPS value (Fn). The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of Fn rises above the threshold indicated by the TUTRAN-GPS Change Limit IE. The change of TUTRAN-GPS value (Fn) is calculated according to the following:

$$F_n = 0 \text{ for } n = 0$$
 
$$F_n = (M_n - M_{n-1}) \text{ mod } 37158912000000 - ((SFN_n - SFN_{n-1}) \text{ mod } 4096) *10*3.84*10^3*16 + F_{n-1} \text{ for } n > 0$$

 $F_n$  is the change of the  $T_{UTRAN-GPS}$  value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

 $M_n$  is the latest measurement result received after point C in the measurement model [25], measured at SFN<sub>n</sub>.

 $M_{n-1}$  is the previous measurement result received after point C in the measurement model [25], measured at SFN<sub>n-1</sub>.

 $M_1$  is the first measurement result received after point C in the measurement model [25], after the first Common Measurement Reporting at initiation or after the last event was triggered.

 $M_0$  is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.

- If the Predicted TUTRAN-GPS Deviation Limit IE is included in the TUTRAN-GPS Measurement Threshold Information IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the Pn and Fn The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when Fn rises above the threshold indicated by the Predicted TUTRAN-GPS Deviation Limit IE. The Pn and Fn are calculated according to the following:

```
\begin{split} P_n &= b \ for \ n = 0 \\ P_n &= ((a/16) * ((SFN_n - SFN_{n-1}) \ mod \ 4096)/100 + ((SFN_n - SFN_{n-1}) \ mod \ 4096) * 10*3.84*10^3*16 + P_{n-1}) \\ mod \ 37158912000000 \qquad \qquad for \ n > 0 \\ F_n &= min((M_n - P_n) \ mod \ 37158912000000), \ (P_n - M_n) \ mod \ 37158912000000) \qquad \qquad for \ n > 0 \end{split}
```

 $P_n$  is the predicted  $T_{UTRAN-GPS}$  value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported T<sub>UTRAN-GPS</sub> Drift Rate value.

b is the last reported  $T_{UTRAN-GPS}$  value.

 $F_n$  is the deviation of the last measurement result from the predicted  $T_{\rm UTRAN\text{-}GPS}$  value  $(P_n)$  when n measurements have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

 $M_n$  is the latest measurement result received after point C in the measurement model [25], measured at SFN<sub>n</sub>.

 $M_I$  is the first measurement result received after point C in the measurement model [25], after the first Common Measurement Reporting at initiation or after the last event was triggered.

The  $T_{UTRAN\text{-}GPS}$  Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [25].

- 2. If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference":
  - If the SFN-SFN Change Limit IE is included in the SFN-SFN Measurement Threshold Information IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of SFN-SFN value (Fn). The Node B shall initiate the Common Measurement Reporting

procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when Fn rises above the threshold indicated by the SFN-SFN Change Limit IE. The change of the SFN-SFN value is calculated according to the following:

$$F_n=0$$
 for  $n=0$   
[FDD -  $F_n = (M_n-a) \mod 614400$  for  $n>0$ ]  
[TDD -  $F_n = (M_n-a) \mod 40960$  for  $n>0$ ]

 $F_n$  is the change of the SFN-SFN value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN.

 $M_n$  is the latest measurement result received after point C in the measurement model [25], measured at SFN<sub>n</sub>.

 $M_I$  is the first measurement result received after point C in the measurement model [25] after the first Common Measurement Reporting at initiation or after the last event was triggered.

- If the Predicted SFN-SFN Deviation Limit IE is included in the SFN-SFN Measurement Threshold Information IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the Pn and Fn The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the Fn rises above the threshold indicated by the Predicted SFN-SFN Deviation Limit IE. The Pn and Fn are calculated according to the following:

$$P_n=b$$
 for  $n=0$ 

$$[FDD - P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100 + P_{n-1}) \bmod 614400 \qquad for \ n>0]$$
 
$$[FDD - F_n = \min((M_n - P_n) \bmod 614400, (P_n - M_n) \bmod 614400) \qquad for \ n>0]$$
 
$$[TDD - P_n = ((a/16) * (15*(SFN_n - SFN_{n-1}) \bmod 4096 + (TS_n - TS_{n-1}))/1500 + P_{n-1}) \bmod 40960 \qquad for \ n>0]$$
 
$$[TDD - F_n = \min((M_n - P_n) \bmod 40960, (P_n - M_n) \bmod 40960) \qquad for \ n>0]$$

 $P_n$  is the predicted SFN-SFN value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN Drift Rate value.

b is the last reported SFN-SFN value.

abs denotes the absolute value.

 $F_n$  is the deviation of the last measurement result from the predicted SFN-SFN value ( $P_n$ ) when n measurements have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

 $M_n$  is the latest measurement result received after point C in the measurement model [25], measured at [TDD - the Time Slot TS<sub>n</sub> of] the Frame SFN<sub>n</sub>.

M1 is the first measurement result received after point C in the measurement model [25] after the first Common Measurement Reporting at initiation or after the last event was triggered.

The SFN-SFN Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [25].

- 3. If the Common Measurement Type IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning":
  - If the TUTRAN-GANSS Change Limit IE is included in the TUTRAN-GANSS Measurement Threshold Information IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of TUTRAN-GANSS value (Fn). The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of Fn rises

above the threshold indicated by the TUTRAN-GANSS Change Limit IE. The change of TUTRAN-GANSS value (Fn) is calculated according to the following:

```
F_n = 0 \text{ for } n = 0
F_n = (GAM_n - GAM_{n-1}) \text{ mod } 5308416000000 - ((SFN_n - SFN_{n-1}) \text{ mod } 4096) *10*3.84*10^3*16 + F_{n-1} \text{ for } n > 0
```

 $F_n$  is the change of the  $T_{\rm UTRAN\text{-}GANSS}$  value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

 $GAM_n$  is the latest GANSS measurement result received after point C in the GANSS measurement model, measured at SFN<sub>n</sub>.

 $GAM_{n-1}$  is the previous GANSS measurement result received after point C in the GANSS measurement model, measured at  $SFN_{n-1}$ .

 $GAM_I$  is the first GANSS measurement result received after point C in the GANSS measurement model, after the first Common Measurement Reporting at initiation or after the last event was triggered.

 $GAM_0$  is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.

GANSS measurement model is the timing between cell j and GANSS Time Of Day.  $T_{UE\text{-}GANSSj}$  is defined as the time of occurrence of a specified UTRAN event according to GANSS time. The specified UTRAN event is the beginning of a particular frame (identified through its SFN) in the first detected path (in time) of the cell j CPICH, where cell j is a cell chosen by the UE. The reference point for  $T_{UE\text{-}GANSSj}$  shall be the antenna connector of the UE.

- If the Predicted TUTRAN-GANSS Deviation Limit IE is included in the TUTRAN-GANSS Measurement Threshold Information IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the Pn and Fn. The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when Fn rises above the threshold indicated by the Predicted TUTRAN-GANSS Deviation Limit IE. The Pn and Fn are calculated according to the following:

```
P_n = b \text{ for } n = 0
```

```
P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100 + ((SFN_n - SFN_{n-1}) \bmod 4096) * 10*3.84*10^3*16 + P_{n-1}) \bmod 5308416000000 \qquad for n > 0
```

$$F_n = min((GAM_n - P_n) \mod 5308416000000, (P_n - GAM_n) \mod 5308416000000)$$
 for  $n > 0$ 

 $P_n$  is the predicted  $T_{UTRAN-GANSS}$  value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported T<sub>UTRAN-GANSS</sub> Drift Rate value.

b is the last reported  $T_{UTRAN-GANSS}$  value.

 $F_n$  is the deviation of the last measurement result from the predicted  $T_{\rm UTRAN\text{-}GANSS}$  value  $(P_n)$  when n measurements have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

 $GAM_n$  is the latest GANSS measurement result received after point C in the GANSS measurement model, measured at  $SFN_n$ .

 $GAM_I$  is the first GANSS measurement result received after point C in the GANSS measurement model, after the first Common Measurement Reporting at initiation or after the last event was triggered.

The T<sub>UTRAN-GANSS</sub> Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [25].

If the *Report Characteristics* IE is not set to "On Demand", the Node B is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION

REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists anymore, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Common Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

#### **Higher laver filtering:**

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

 $F_n$  is the updated filtered measurement result

 $F_{n-1}$  is the old filtered measurement result

 $M_n$  is the latest received measurement result from physical layer measurements, the unit used for  $M_n$  is the same unit as the reported unit in the COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for Fn)

 $a = 1/2^{(k/2)}$ , where k is the parameter received in the *Measurement Filter Coefficient IE*. If the *Measurement Filter Coefficient IE* is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter,  $F_0$  is set to  $M_1$  when the first measurement result from the physical layer measurement is received.

#### Common measurement accuracy:

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning", then the Node B shall use the *UTRAN GPS Timing Measurement Accuracy Class* IE included in the *Common Measurement Accuracy* IE according to the following:

- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class A", then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes A, B and C.
- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class B", then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes B and C.
- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class C", then the Node B shall perform the measurements with the accuracy according to class C.

If the *Common Measurement Type* IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning", then the Node B shall use the  $T_{UTRAN-GANSS}$  Measurement Accuracy Class IE included in the Common Measurement Accuracy IE according to the following:

- If the  $T_{UTRAN-\ GANSS}$  Measurement Accuracy Class IE indicates "Class A", then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes A, B and C.
- If the  $T_{UTRAN-\ GANSS}$  Measurement Accuracy Class IE indicates "Class B", then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes B and C.
- If the  $T_{UTRAN-\ GANSS}$  Measurement Accuracy Class IE indicates "Class C", then the Node B shall perform the measurements with the accuracy according to class C.

### **Measurement Recovery Behavior:**

If the *Measurement Recovery Behavior* IE is included in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall, if Measurement Recovery Behavior is supported, include the *Measurement Recovery Support Indicator* IE in the COMMON MEASUREMENT INITIATION RESPONSE message and perform the Measurement Recovery Behavior as described in subclause 8.2.9.2.

#### [FDD - Noise Floor Reporting:]

[FDD - If the *Common Measurement Type* IE is set to "Received Total Wide Band Power" and if the *Reference Received Total Wide Band Power Reporting* IE is included in the same COMMON MEASUREMENT INITIATION REQUEST message, the Node B may include the *Reference Received Total Wide Band Power* IE in the message used to report the common measurement.]

[FDD - If the *Reference Received Total Wide Band Power Reporting* IE is included in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall if supported, include the *Reference Received Total Wide Band Power Support Indicator* IE or the *Reference Received Total Wide Band Power* IE in the COMMON MEASUREMENT INITIATION RESPONSE.]

#### Response message:

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent over the Node B Control Port. The message shall include the same Measurement ID that was used in the measurement request. Only in the case where the *Report Characteristics* IE is set to "On Demand" or "On Modification", the COMMON MEASUREMENT INITIATION RESPONSE message shall include the measurement result and also the *Common Measurement Achieved Accuracy* IE if the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning" or "UTRAN GANSS Timing of Cell Frames for UE positioning".

- [1.28Mcps TDD –If *Time Slot LCR* IE is not present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement response shall apply to all the available time slots in the frequency.]
- [1.28Mcps TDD If *UARFCN* IE is not present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement response shall apply to all the frequencies in the cell.]
- [1.28Mcps TDD If neither *UARFCN* IE nor *Time Slot LCR* IE is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement response shall apply to all available time slots in all frequencies and the *Additional Time Slot LCR* IE should be ignored.]
- [1.28Mcps TDD If *Additional Time Slot LCR* IE is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement results of the additional time slot (s) should be included in the COMMON MEASUREMENT INITIATION RESPONSE message.]

If the Common Measurement Type IE is set to "SFN-SFN Observed Time Difference" and the Report Characteristics IE is set to "On Demand" or "On Modification", all the available measurement results shall be reported in the Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information IE in the SFN-SFN Measurement Value Information IE and the Node B shall indicate in the Unsuccessful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information IE all the remaining neighbouring cells with no measurement result available in the COMMON MEASUREMENT INITIATION RESPONSE message. For all available measurement results, the Node B shall include in the Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information IE the SFN-SFN Quality IE and the SFN-SFN Drift Rate Quality IE, if available.

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning" and the *Report Characteristics* IE is set to "On Demand" or "On Modification", the Node B shall include in the  $T_{UTRAN-GPS}$  *Measurement Value Information* IE the  $T_{UTRAN-GPS}$  *Quality* IE and the  $T_{UTRAN-GPS}$  *Drift Rate Quality* IE, if available.

[FDD - If the *Common Measurement Type* IE is set to "Received Total Wide Band Power for Cell Portion", "Transmitted Carrier Power for Cell Portion", "Transmitted carrier power of all codes not used for HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH transmission for Cell Portion", "HS-DSCH Required Power for Cell Portion" or "HS-DSCH Provided Bit Rate for Cell Portion" and the *Report Characteristics* IE is set to "On Demand", all the available measurement results for each cell portion shall be included in the COMMON MEASUREMENT INITIATION RESPONSE message.]

If the Common Measurement Type IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning" and the Report Characteristics IE is set to "On Demand" or "On Modification", the Node B shall include in the  $T_{UTRAN-GANSS}$  Measurement Value Information IE, the  $T_{UTRAN-GANSS}$  Quality IE and the  $T_{UTRAN-GANSS}$  Drift Rate Quality IE, if available.

# 8.2.8.3 Unsuccessful Operation

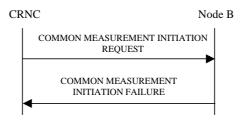


Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated [1.28Mcps TDD-in any time slot], the Node B shall send a COMMON MEASUREMENT INITIATION FAILURE message over the Node B Control Port. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message and the Cause IE set to an appropriate value.

Typical cause values are as follows:

### **Radio Network Layer Cause:**

- Measurement not supported for the object.
- Measurement Temporarily not Available

### 8.2.8.4 Abnormal Conditions

The allowed combinations of the Common Measurement Type received in the Common Measurement Type IE and the Common Measurement Object Type received in the COMMON MEASUREMENT INITIATION REQUEST message are shown in the table below. For not allowed combinations, the Node B shall regard the Common Measurement Initiation procedure as failed.

Table 3a: Allowed Common Measurement Type and Common Measurement Object Type combinations

Common Measurement Type	Common Measurement Object Type							
	Cell	RACH	Power Local Cell Group	E-DCH RACH				
Received Total Wide Band Power	X		•					
Transmitted Carrier Power	X							
Acknowledged PRACH Preambles		Х						
E-DCH RACH Report				X				
UL Timeslot ISCP	Х							
UTRAN GPS Timing of Cell Frames for	X							
UE Positioning								
SFN-SFN Observed Time Difference	X							
[TDD - Transmitted carrier power of all	X							
codes not used for HS-PDSCH or HS-								
SCCH transmission]								
[FDD - Transmitted carrier power of all								
codes not used for HS-PDSCH, HS-								
SCCH, E-AGCH, E-RGCH or E-HICH								
transmission]								
HS-DSCH Required Power	X							
HS-DSCH Provided Bit Rate	X							
Received Total Wide Band Power for	FDD only							
Cell Portion								
Transmitted Carrier Power for Cell Portion	FDD only							
Transmitted carrier power of all codes	FDD only							
not used for HS-PDSCH, HS-SCCH, E-								
AGCH, E-RGCH or E-HICH transmission								
for Cell Portion								
UpPCH interference	1.28 Mcps							
	TDD only							
DL Transmission Branch Load	FDD only		FDD only					
HS-DSCH Required Power for Cell	FDD only							
Portion								
HS-DSCH Provided Bit Rate for Cell	FDD only							
Portion								
E-DCH Provided Bit Rate	X							
E-DCH Non-serving Relative Grant	FDD only							
Down Commands								
Received Scheduled E-DCH Power	FDD only							
Share								
Received Scheduled E-DCH Power	FDD only							
Share for Cell Portion								
UTRAN GANSS Timing of Cell Frames	X							
for UE Positioning								

[TDD - If the Common Measurement Type requires the Time Slot Information but the [3.84Mcps TDD and 7.68Mcps TDD - *Time Slot IE*] [1.28Mcps TDD - *Time Slot LCR* IE] is not present in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.]

[1.28Mcps TDD - For a multi-frequency cell, if the *Additional Time Slot LCR* IE is present in the COMMON MEASUREMENT INITIATION REQUEST message, only on-demand and period measurement could be used, otherwise, the Node B shall reject the procedure by sending a COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE message.]

If the COMMON MEASUREMENT INITIATION REQUEST message contains the *SFN-SFN Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the COMMON MEASUREMENT INITIATION REQUEST message contains the  $T_{UTRAN-GPS}$  Measurement Threshold Information IE (in the Measurement Threshold IE contained in the Report Characteristics IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", but the *Neighbouring Cell Measurement Information* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

If the Common Measurement Type IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning", but the  $T_{UTRAN-GPS}$  Measurement Accuracy Class IE in the Common Measurement Accuracy IE is not included in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

If the *Common Measurement Type* IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning", but the  $T_{UTRAN-GANSS}$  Measurement Accuracy Class IE in the Common Measurement Accuracy IE is not included in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

[FDD - If the COMMON MEASUREMENT INITIATION REQUEST message contains the *Reference Received Total Wide Band Power Reporting* IE and it does not contain the *Common Measurement Type* IE set to "Received Total Wide Band Power", the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.]

The allowed combinations of the Common Measurement Type and Report Characteristics Type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Common Measurement Initiation procedure as failed.

Table 4: Allowed Common Measurement Type and Report Characteristics Type combinations

Common				Report C	haracteri	stics Typ	е		
Measurement Type	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E		On Modification
Received Total Wide Band Power	X	X	X	X	X	X	X	X	
Transmitted Carrier Power	X	X	X	Х	X	X	X	Х	
Acknowledged PRACH Preambles	Х	X	Х	Х	X	Х	X	Х	
E-DCH RACH Report	X	X	X	X	Χ	Χ	Χ	X	
UL Timeslot ISCP	X	X	Х	X	Χ	Χ	Χ	X	
UTRAN GPS Timing	X	X							Χ
of Cell Frames for UE									
Positioning SFN-SFN Observed	X	X							X
Time Difference	^	^							^
[TDD - Transmitted	X	Х	Х	X	X	X	X	X	
carrier power of all			^		^	^	^		
codes not used for									
HS-PDSCH or HS-									
SCCH transmission]									
[FDD - Transmitted									
carrier power of all									
codes not used for									
HS-PDSCH, HS-									
SCCH, E-AGCH, E-									
RGCH or E-HICH									
transmission]									
HS-DSCH Required	X	X	Х	Χ			Χ	X	
Power									
HS-DSCH Provided	X	X							
Bit Rate									
[FDD - Received	X	X	Χ	X	Χ	Χ	Χ	Χ	
Total Wide Band									
Power for Cell									
Portion]									
[FDD - Transmitted	X	X	X	X	X	X	Χ	X	
Carrier Power for Cell									
Portion]									
[FDD - Transmitted	X	X	X	X	X	X	X	X	
carrier power of all									
codes not used for									
HS-PDSCH, HS-									
SCCH, E-AGCH, E-									
RGCH or E-HICH									
transmission for Cell									
Portion]	V	V	V	V	V	V	V	V	
UpPTS interference	X	X	X	X	X	X	X	X	
DL Transmission Branch Load	^	^	Χ	^			^	^	
[FDD - HS-DSCH	X	X	X	X			X	X	
Required Power for			,						
Cell Portion]									
[FDD - HS-DSCH	Χ	Х	1						
Provided Bit Rate for		1							
Cell Portion]									
E-DCH Provided Bit	X	X							
Rate									
E-DCH Non-serving	X	X	X	X			Χ	X	
Relative Grant Down									
Commands									
Received Scheduled	X	X	Χ	X	X	X	X	X	
E-DCH Power Share									

[FDD - Received	X	Χ	X	X	Χ	X	X	Χ	
Scheduled E-DCH									
Power Share for Cell									
Portion]									
UTRAN GANSS	X	X							X
Timing of Cell									
Frames for UE									
Positioning									

If the *SFN* IE is included in the COMMON MEASUREMENT INITIATION REQUEST message and the *Report Characteristics* IE is other than "Periodic", "On Demand" or "On Modification", the Node B shall regard the Common Measurement Initiation procedure as failed.

# 8.2.9 Common Measurement Reporting

#### 8.2.9.1 General

This procedure is used by the Node B to report the result of measurements requested by the CRNC with the Common Measurement Initiation procedure.

### 8.2.9.2 Successful Operation



Figure 13: Common Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Common Measurement Reporting procedure. The COMMON MEASUREMENT REPORT message shall use the Node B Control Port.

The *Measurement ID* IE shall be set to the Measurement ID provided by the CRNC when initiating the measurement with the Common Measurement Initiation procedure.

[1.28Mcps TDD –If *Time Slot LCR* IE is not present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement results of all the available time slots in the frequency should be included in the COMMON MEASUREMENT INITIATION REPORT message.]

[1.28Mcps TDD - If *UARFCN* IE is not present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement results of all the frequencies in the cell should be included in the COMMON MEASUREMENT INITIATION REPORT message.]

[1.28Mcps TDD - If neither *UARFCN* IE nor *Time Slot LCR* IE is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement results of all available time slots in all frequencies should be included in the COMMON MEASUREMENT INITIATION REPORT message.]

[1.28Mcps TDD - If *Additional Time Slot LCR* IE is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement results of the additional time slot (s) should be included in the COMMON MEASUREMENT INITIATION REPORT message.]

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]) or the measurement is temporarily not available in case Measurement Recovery Behavior is supported, the *Common Measurement Value Information* IE shall indicate Measurement not Available. If the Node B was configured to perform the Measurement Recovery Behavior, the Node B shall indicate Measurement Available to the CRNC when the achieved measurement accuracy again fulfils the given accuracy requirement (see ref. [22] and [23]) and include the

*Measurement Recovery Report Indicator* IE in the COMMON MEASUREMENT REPORT message if the requested measurement reporting criteria are not met.

For measurements included in the *Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE, the Node B shall include the *SFN-SFN Quality* IE and the *SFN-SFN Drift Rate Quality* IE if available.

If the Common Measurement Type provided by RNC when initiating the measurement with the Common Measurement Initiation procedure was "UTRAN GPS Timing of Cell Frames for UE Positioning", then the Node B shall include in the  $T_{UTRAN-GPS}$  Measurement Value Information IE the  $T_{UTRAN-GPS}$  Quality IE and the  $T_{UTRAN-GPS}$  Drift Rate Quality IE, if available.

If the Common Measurement Type provided by RNC when initiating the measurement with the Common Measurement Initiation procedure was "UTRAN GANSS Timing of Cell Frames for UE Positioning", then the Node B shall include in the  $T_{UTRAN-GANSS}$  Measurement Value Information IE the  $T_{UTRAN-GANSS}$  Quality IE and the  $T_{UTRAN-GANSS}$  Drift Rate Quality IE, if available.

[FDD - For Received Total Wide Band Power for Cell Portion, Transmitted Carrier Power for Cell Portion, Transmitted carrier power of all codes not used for HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH transmission for Cell Portion, HS-DSCH Required Power for Cell Portion, HS-DSCH Provided Bit Rate for Cell Portion, Received Scheduled E-DCH Power Share for Cell Portion measurements, all the available measurement results for each cell portion shall be included in the COMMON MEASUREMENT REPORT message.]

If the Common Measurement Object Type provided by RNC when initiating the measurement with the Common Measurement Initiation procedure was "Cell" or "RACH", then the Node B, if supported, shall include the *C-ID* IE in the COMMON MEASUREMENT REPORT message.

#### 8.2.9.3 Abnormal Conditions

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# 8.2.10 Common Measurement Termination

### 8.2.10.1 General

This procedure is used by the CRNC to terminate a measurement previously requested by the Common Measurement Initiation procedure.

### 8.2.10.2 Successful Operation



Figure 14: Common Measurement Termination procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT TERMINATION REQUEST message, sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall terminate reporting of common measurements corresponding to the received *Measurement ID* IE.

### 8.2.10.3 Abnormal Conditions

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### 8.2.11 Common Measurement Failure

### 8.2.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Common Measurement Initiation procedure can no longer be reported.

# 8.2.11.2 Successful Operation



Figure 15: Common Measurement Failure procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT FAILURE INDICATION message, sent from the Node B to the CRNC using the Node B Control Port, to inform the CRNC that a previously requested measurement can no longer be reported. The Node B has locally terminated the indicated measurement.

#### 8.2.11.3 Abnormal Conditions

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# 8.2.12 Cell Setup

#### 8.2.12.1 General

This procedure is used to set up a cell in the Node B. The CRNC takes the cell, identified via the *C-ID* IE, into service and uses the resources in the Node B identified via the *Local Cell ID* IE.

# 8.2.12.2 Successful Operation

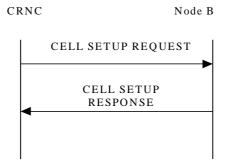


Figure 16: Cell Setup procedure, Successful Operation

The procedure is initiated with a CELL SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon Reception, the Node B shall reserve the necessary resources and configure the new cell according to the parameters given in the message.

[FDD - If the CELL SETUP REQUEST message includes one or more *Secondary CPICH Information* IE, the Node B shall configure and activate the Secondary CPICH(s) in the cell according to received configuration data.]

The *Maximum Transmission Power* IE value shall be stored in the Node B and, at any instance of time, the total maximum output power in the cell shall not be above this value. [1.28Mcps TDD - For a multi-frequency cell, at any instance of time, the total maximum output power for each frequency of the cell shall not be above this value.]

- [FDD If the *Closed Loop Timing Adjustment Mode* IE is included in the CELL SETUP REQUEST message, the value shall be stored in the Node B and applied when closed loop Feed-Back mode diversity is used on DPCH.]
- [TDD If the *Reference SFN Offset* IE is included in the CELL SETUP REQUEST message, the Node B where a reference clock is connected shall consider the SFN derived from the synchronisation port and the reference offset for reference time setting. All other Node Bs shall ignore the *Reference SFN Offset* IE if included.]
- [FDD If the *IPDL Parameter Information* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL shall be stored in the Node B and applied according to the *IPDL Indicator* IE value. If the *Burst Mode Parameters* IE is included in the *IPDL FDD Parameters* IE, the IPDL shall be operated in burst mode according to ref [10].]
- [3.84Mcps TDD and 7.68Mcps TDD If the *IPDL Parameter Information* IE containing *IPDL TDD Parameters* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL in 3.84Mcps TDD and 7.68Mcps TDD modes shall be stored in the Node B and applied according to the *IPDL Indicator* IE value. If the *Burst Mode Parameters* IE is included in the *IPDL TDD Parameters* IE, the IPDL shall be operated in burst mode according to ref [21].]
- [1.28Mcps TDD If the *IPDL Parameter Information LCR* IE containing *IPDL TDD Parameters LCR* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL in 1.28Mcps TDD mode shall be stored in the Node B and applied according to the *IPDL Indicator* IE value. For MBSFN only mode, this IE shall be ignored by the Node B. If the *Burst Mode Parameters* IE is included in the *IPDL TDD Parameters LCR* IE, the IPDL shall be operated in burst mode according to ref [21].]
- [1.28Mcps TDD For a multi-frequency cell, the *UARFCN Information LCR* IE indicates information about the configuration of the frequency and timeslot of the secondary frequency/frequencies.]
- When the cell is successfully configured, the Node B shall store the *Configuration Generation ID* IE value and send a CELL SETUP RESPONSE message as a response.
- [FDD When the cell is successfully configured the CPICH(s), Primary SCH, Secondary SCH, Primary CCPCH and BCH exist.][3.84Mcps TDD and 7.68Mcps TDD When the cell is successfully configured the SCH, Primary CCPCH and BCH exist and the switching-points for the 3.84Mcps TDD / 7.68Mcps TDD frame structure are defined.] [1.28Mcps TDD When the cell is successfully configured, the DwPCH, Primary CCPCH and BCH exist and the switching-points for the 1.28Mcps TDD frame structure are defined.] The cell and the channels shall be set to the state Enabled [6].
- [1.28Mcps TDD For a multi-frequency cell, the Node B shall consider the cell as having been successfully configured as long as the primary frequency is normally setup. When the cell is successfully configured, the Node B shall respond with the CELL SETUP RESPONSE message.]
- [TDD The Node B shall ignore the DPCH/PUSCH/PRACH Constant Value IEs.]
- [1.28Mcps TDD For a multi-frequency cell, when the cell is successfully configured, the Node B shall configure the UpPCH channel of the primary frequency in the timeslot of UpPTS.]
- [FDD If the CELL SETUP REQUEST message includes *Cell Portion Information* IE, the Node B shall associate *Associated Secondary CPICH* IE to the cell portion indicated by *Cell Portion ID* IE and the *Maximum Transmission Power for Cell Portion* IE value shall be stored in the Node B and at any instance of time the total maximum output power in the cell portion indicated by *Cell Portion ID* IE shall not be above this value.]
- [FDD If the *MIMO Pilot Configuration* IE is included in the CELL SETUP REQUEST message, then the parameters defining the pilot configuration for MIMO shall be stored in the Node B and applied when MIMO mode is used according to [10].]
- [3.84Mcps TDD and 7.68Mcps TDD If the CELL SETUP REQUEST message includes the *MBSFN Cell Parameter ID* IE, then the Node B shall configure the associated timeslot to operate in MBSFN mode using the scrambling codes and midambles dictated by the *MBSFN Cell Parameter ID* IE.]
- [1.28Mcps TDD If the CELL SETUP REQUEST message includes the *MBSFN Only Mode Indicator* IE, the Node B shall configure the associated timeslot(s) to operate as MBSFN time slot(s) using the scrambling codes and basic midamble codes dictated by the *Time Slot Parameter ID* IE.]
- [1.28Mcps TDD If the cell is operating in MBSFN only mode, the *DwPCH Information* IE shall be ignored by the Node B.]

[1.28 Mcps TDD - If the cell is operating in MBSFN only mode, the PCCPCH shall be deployed on the MBSFN Special Time Slot [19].]

[FDD - If the MIMO Pilot Configuration Extension IE is included in CELL SETUP REQUEST, then the parameters extending the pilot information for MIMO shall be stored in the Node B and applied when MIMO mode is used according to [10]]

# 8.2.12.3 Unsuccessful Operation

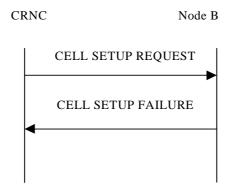


Figure 17: Cell Setup procedure: Unsuccessful Operation

If the Node B cannot set up the cell according to the information given in CELL SETUP REQUEST message the CELL SETUP FAILURE message shall be sent to the CRNC.

In this case, the cell is Not Existing in the Node B. The Configuration Generation ID shall not be changed in the Node B.

The Cause IE shall be set to an appropriate value.

Typical cause values are as follows:

### **Radio Network Layer Cause:**

- S-CPICH not supported
- Requested Tx Diversity Mode not supported
- Power level not supported
- Node B Resources unavailable
- IPDL not supported
- [FDD S-CPICH power offset support not available]

### **Miscellaneous Cause:**

- O&M Intervention
- Control processing overload
- HW failure

# 8.2.12.4 Abnormal Conditions

If the state of the cell already is Enabled or Disabled [6] when the CELL SETUP REQUEST message is received in the Node B, it shall reject the configuration of the cell and all channels in the CELL SETUP REQUEST message by sending a CELL SETUP FAILURE message with the *Cause* IE set to "Message not compatible with receiver state".

If the Local Cell on which the cell is mapped does not belong to a Power Local Cell Group and the requested maximum transmission power indicated by the *Maximum Transmission Power* IE exceeds the Maximum DL Power Capability of the Local Cell, the Node B shall consider the procedure as having failed and send a CELL SETUP FAILURE message to the CRNC.

If the Local Cell on which the cell is mapped belongs to a Power Local Cell Group and the requested maximum transmission power indicated by *Maximum Transmission Power* IE exceeds the Maximum DL Power Capability of the Power Local Cell Group, the Node B shall consider the procedure as having failed and send a CELL SETUP FAILURE message to the CRNC.

# 8.2.13 Cell Reconfiguration

### 8.2.13.1 General

This procedure is used to reconfigure a cell in the Node B.

### 8.2.13.2 Successful Operation

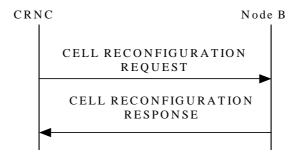


Figure 18: Cell Reconfiguration procedure, Successful Operation

The procedure is initiated with a CELL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon Reception, the Node B shall reconfigure the cell according to the parameters given in the message.

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary SCH Information* IE, the Node B shall reconfigure the Primary SCH power in the cell according to *Primary SCH Power* IE value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Secondary SCH Information* IE, the Node B shall reconfigure the Secondary SCH power in the cell according to the *Secondary SCH Power* IE value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CPICH Information* IE, the Node B shall reconfigure the Primary CPICH power in the cell according to the *Primary CPICH Power* IE value. The Node B shall adjust all the transmitted power levels relative to the Primary CPICH power according to the new value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes one or more *Secondary CPICH Information* IE, the Node B shall reconfigure the power for each Secondary CPICH in the cell according to their *Secondary CPICH Power* IE value.]

[3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *SCH Information* IE, the Node B shall reconfigure the SCH power in the cell according to the *SCH Power* IE value.]

[7.68Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *SCH Information 7.68Mcps* IE, the Node B shall reconfigure the SCH power in the cell according to the *SCH Power* IE value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *Timing Advance Applied* IE, the Node B shall apply the necessary functions for Timing Advance in that cell including reporting of the Rx Timing Deviation measurement, according to the *Timing Advance Applied* IE value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CCPCH Information* IE, the Node B shall reconfigure the BCH power in the cell according to the *BCH Power* IE value.]

[1.28Mcps TDD and 3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *PCCPCH Information* IE, the Node B shall reconfigure the P-CCPCH power in the cell according to the *PCCPCH Power* IE value. The Node B shall adjust all the transmitted power levels relative to the Primary CCPCH power according to the new value.]

[7.68Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *PCCPCH Information* 7.68Mcps IE, the Node B shall reconfigure the P-CCPCH power in the cell according to the *PCCPCH Power* IE value. The Node B shall adjust all the transmitted power levels relative to the Primary CCPCH power according to the new value.]

If the CELL RECONFIGURATION REQUEST message includes the *Maximum Transmission Power* IE, the value shall be stored in the Node B and at any instance of time the total maximum output power in the cell shall not be above this value.

[3.84Mcps TDD and 7.68Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *Time Slot Configuration* IE, the Node B shall reconfigure switching-point structure in the cell according to the *Time Slot* IE value.]

[1.28Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *Time Slot Configuration LCR* IE, the Node B shall reconfigure switching-point structure in the cell according to the *Time Slot LCR* IE value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes any of the *DPCH/PUSCH/PRACH Constant Value* IEs, the Node B shall ignore them]

[1.28Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *DwPCH Information* IE, the Node B shall reconfigure the DwPCH power in the Cell according to the *DwPCH Power* IE.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information* IE with the *IPDL Indicator* IE set to the value "Active" the Node B shall apply the IPDL in that cell according to the latest received parameters defined by the *IPDL FDD Parameters* IE. If the *Burst Mode Parameters* IE is included in the *IPDL FDD Parameters* IE, the IPDL shall be operated in burst mode according to ref [10].]

[3.84Mcps TDD and 7.68Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information* IE with the *IPDL Indicator* IE set to the value "Active", the Node B shall apply the IPDL in that cell according to the latest received parameters defined by the *IPDL TDD Parameters* IE. If the *Burst Mode Parameters* IE is included in the *IPDL TDD Parameters* IE, the IPDL shall be operated in burst mode according to ref [21].]

[1.28Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information LCR* IE with the *IPDL Indicator* IE set to the value "Active", the Node B shall apply the IPDL in that cell according to the latest received parameters defined by the *IPDL TDD Parameters LCR* IE. If the *Burst Mode Parameters* IE is included in the *IPDL TDD Parameters LCR* IE, the IPDL shall be operated in burst mode according to ref [21].]

If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information* IE with *the IPDL Indicator* IE set to the value "Inactive", the Node B shall deactivate the ongoing IPDL.

When the cell is successfully reconfigured, the Node B shall store the new *Configuration Generation ID* IE value and send a CELL RECONFIGURATION RESPONSE message as a response.

If the CELL RECONFIGURATION REQUEST message includes the *Synchronisation Configuration* IE, the Node B shall reconfigure the indicated parameters in the cell according to the value of the *N\_INSYNC\_IND*, *N\_OUTSYNC\_IND* and *T\_RLFAILURE* IEs. When the parameters in the *Synchronisation Configuration* IE affect the thresholds applied to a RL set, the Node B shall immediately apply the new thresholds. When applying the new thresholds, the Node B shall not change the state or value of any of the timers and counters for which the new thresholds apply.

[FDD - If the CELL RECONFIGURATION REQUEST message includes *Cell Portion Information* IE, the *Maximum Transmission Power for Cell Portion* IE value shall be stored in the Node B and at any instance of time the total maximum output power in the cell portion indicated by *Cell Portion ID* IE shall not be above this value.]

[FDD - If the *MIMO Pilot Configuration* IE is included in the CELL RECONFIGURATION REQUEST message, then the parameters defining the pilot configuration for MIMO shall be stored in the Node B and applied when MIMO mode is used according to [10].]

[3.84Mcps TDD and 7.68Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *MBSFN Cell Parameter ID* IE, then the Node B shall configure the associated timeslot to operate in MBSFN mode using the scrambling code and midamble dictated by the *MBSFN Cell Parameter ID* IE.]

[1.28Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *UARFCN Information To Add LCR* IE, the Node B shall reserve the necessary resource and add a secondary frequency to the cell according to the information indicated in the *UARFCN Information To Add LCR* IE.]

[1.28Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *UARFCN Information To Modify LCR* IE, the Node B shall reconfigure the configuration of the secondary frequency within the cell according to the information indicated in the *UARFCN Information To Modify LCR* IE.]

[1.28Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *UARFCN Information To Delete LCR* IE, the Node B shall remove the secondary frequency from the cell and any remaining dedicated channels on the secondary frequency according to the frequency information given in the *UARFCN Information To Delete LCR* IE. The states for the frequency within the cell shall be set to "Not existing". The Node B shall remove all Radio Links and all Node B Communication Contexts related to the secondary frequency within the cell. The Node B shall also initiate the release of the user plane transport bearers for the removed dedicated channels on the secondary frequency within the cell.]

[1.28 Mcps TDD - If the cell is operating in MBSFN only mode, the PCCPCH shall be deployed on the MBSFN Special Time Slot [19].]

[FDD - If the MIMO Pilot Configuration Extension IE is included in CELL RECONFIGURATION REQUEST, then the parameters extending the pilot information for MIMO shall be stored in the Node B and applied when MIMO mode is used according to [10]

# 8.2.13.3 Unsuccessful Operation

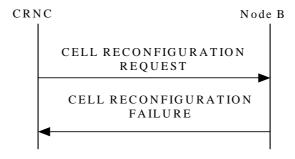


Figure 19: Cell Reconfiguration procedure: Unsuccessful Operation

If the Node B cannot reconfigure the cell according to the information given in CELL RECONFIGURATION REQUEST message, the CELL RECONFIGURATION FAILURE message shall be sent to the CRNC.

In this case, the Node B shall keep the old configuration of the cell and the Configuration Generation ID shall not be changed in the Node B.

The Cause IE shall be set to an appropriate value.

Typical cause values are as follows:

#### **Radio Network Layer Cause:**

- Power level not supported

- Node B Resources unavailable
- IPDL not supported
- [FDD S-CPICH power offset support not available]

#### **Miscellaneous Cause:**

- O&M Intervention
- Control processing overload
- HW failure

#### 8.2.13.4 Abnormal Conditions

If the *IPDL Indicator* IE set to the value "Active" is included in the CELL RECONFIGURATION REQUEST message and there is active IPDL ongoing in the Node B, the Node B shall respond with the CELL RECONFIGURATION FAILURE message with the cause value "IPDL already activated".

If the *IPDL Indicator* IE set to the value "Active" is included in the CELL RECONFIGURATION REQUEST message and there is no IPDL stored in the Node B defining the IPDL, the Node B shall respond with the CELL RECONFIGURATION FAILURE message with the cause value "IPDL parameters not available".

If the Local Cell on which the cell is mapped does not belong to of a Power Local Cell Group and the requested maximum transmission power indicated by the *Maximum Transmission Power* IE exceeds the Maximum DL Power Capability of the Local Cell, the Node B shall consider the procedure as having failed and send a CELL RECONFIGURATION FAILURE message to the CRNC.

If the Local Cell on which the cell is mapped belongs to a Power Local Cell Group and the requested maximum transmission power indicated by *Maximum Transmission Power* IE exceeds the Maximum DL Power Capability of the Power Local Cell Group, the Node B shall consider the procedure as having failed and send a CELL RECONFIGURATION FAILURE message to the CRNC.

# 8.2.14 Cell Deletion

### 8.2.14.1 General

This procedure is used to delete a cell in the Node B.

### 8.2.14.2 Successful Operation

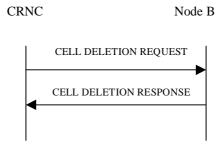


Figure 20: Cell Deletion procedure, Successful Operation

The procedure is initiated with a CELL DELETION REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon reception, the Node B shall remove the cell and any remaining common and dedicated channels within the cell. The states for the cell and the deleted common channels shall be set to Not Existing [6]. The Node B shall remove all Radio Links from the Cell and all Node B Communication Contexts that as a result do not have a Radio Link. The Node B shall also initiate release of the user plane transport bearers for the removed common and dedicated channels except the case that there is at least one FACH channel in this cell using the same transport bearer existing in other cell(s) in the Node B. In this case, the Node B shall remove the cell and any remaining common and

dedicated channels within the cell but keep the common transport bearer which is used by the remaining common transport channel(s) in other cell(s).

When the cell is deleted, the Node B shall send a CELL DELETION RESPONSE message as a response.

# 8.2.14.3 Unsuccessful Operation

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#### 8.2.14.4 Abnormal Conditions

If the CELL DELETION REQUEST message includes a *C-ID* IE value that is not existing in the Node B, the Node B shall respond with the CELL DELETION RESPONSE message.

# 8.2.15 Resource Status Indication

## 8.2.15.1 General

This procedure is used in the following cases:

- 1. When a Local Cell becomes Existing at the Node B.
- 2. When a Local Cell is to be deleted in Node B, i.e. becomes Not Existing.
- 3. When the capabilities of the Local Cell change at the Node B.
- 4. When a cell has changed its capability and/or its resource operational state at the Node B.
- 5. When common physical channels and/or common transport channels have changed their capabilities at the Node B.
- 6. When a Communication Control Port has changed its resource operational state at the Node B.
- 7. When a Local Cell Group has changed its resource capability at the Node B.
- 8. [1.28Mcps TDD For a multi-frequency cell, when a cell has been successfully set up but a secondary frequency failure has occurred within the cell.]

Each of the above cases shall trigger a Resource Status Indication procedure and the RESOURCE STATUS INDICATION message shall contain the logical resources affected for that case and the cause value when applicable.

# 8.2.15.2 Successful Operation



Figure 21: Resource Status Indication procedure, Successful Operation

The procedure is initiated with a RESOURCE STATUS INDICATION message sent from the Node B to the CRNC using the Node B Control Port.

## **Local Cell Becomes Existing:**

When a Local Cell becomes Existing at the Node B, the Node B shall make it available to the CRNC by sending a RESOURCE STATUS INDICATION message containing a "No Failure" Indication, the *Local Cell ID* IE and the *Add/Delete Indicator* IE set equal to "Add".

When the capacity credits and consumption laws are shared between several Local Cells, the Node B includes the *Local Cell Group ID* IE for the Local Cell. If the *Local Cell Group Information* IE has not already been reported in a previous RESOURCE STATUS INDICATION message, the Node B shall include the capacity credits and the consumption laws in the *Local Cell Group Information* IE [FDD - , including also the E-DCH capacity consumption law, if E-DCH is supported].

If the Local Cell IE contains both the DL Or Global Capacity Credit IE and the UL Capacity Credit IE, then the internal resource capabilities of the Local Cell are modelled independently in the Uplink and Downlink direction. If the UL Capacity Credit IE is not present, then the internal resource capabilities of the Local Cell are modelled as shared resources between Uplink and Downlink. If the Local Cell Group Information IE contains both the DL Or Global Capacity Credit IE and the UL Capacity Credit IE, then the internal resource capabilities of the Local Cell Group are modelled independently in the Uplink and Downlink direction. If the UL Capacity Credit IE is not present, then the internal resource capabilities of the Local Cell Group are modelled as shared resources between Uplink and Downlink.

If the Node B internal power resources are pooled for a group of Local Cells, the Node B shall include the *Power Local Cell Group ID* IE for the Local Cell. If the *Power Local Cell Group Information* IE has not already been reported in a previous RESOURCE STATUS INDICATION message, the Node B shall include this IE for the concerned Power Local Cell Group in this message. Furthermore, the sum of the Maximum DL Power Capability of all the Local Cells belonging to the same Power Local Cell Group shall not exceed the Maximum DL Power Capability of the concerned Power Local Cell Group.

If the Local Cell is HSDPA-capable when it becomes Existing, the Node B shall include the *HSDPA Capability* IE set to "HSDPA Capable" and may include *HS-DSCH MAC-d PDU Size Capability* IE for the Local Cell.

If the Local Cell is E-DCH-capable when it becomes Existing, the Node B shall include the *E-DCH Capability* IE set to "E-DCH Capable" and may include *E-DCH MAC-d PDU Size Capability* IE for the Local Cell.

If the Local Cell is MBMS-capable when it becomes Existing, the Node B shall include the *MBMS Capability* IE set to "MBMS Capable" for the Local Cell.

[FDD - If the Local Cell is F-DPCH-capable when it becomes Existing, the Node B shall include the *F-DPCH Capability* IE set to "F-DPCH Capable" for the Local Cell.]

[FDD - If the Local Cell is both HSDPA-capable and E-DCH-capable when it becomes Existing, then the Node B shall include the *Continuous Packet Connectivity DTX-DRX Capability* IE set to "Continuous Packet Connectivity DTX-DRX Capable" for the Local Cell when Continuous Packet Connectivity DTX-DRX is supported.]

[FDD - If the Local Cell is both HSDPA-capable and E-DCH-capable when it becomes Existing, then the Node B shall include the *Continuous Packet Connectivity HS-SCCH less Capability* IE set to "Continuous Packet Connectivity HS-SCCH less is supported.]

[FDD - If the Local Cell is MIMO-capable when it becomes Existing, then the Node B shall include the *MIMO Capability* IE set to "MIMO Capable" for the Local Cell.]

[FDD - If the Local Cell is SixtyfourQAM DL-capable when it becomes Existing, then the Node B shall include the *SixtyfourQAM DL Capability* IE set to "SixtyfourQAM DL Capable" for the Local Cell.]

[FDD - If the Local Cell is Enhanced FACH-capable when it becomes Existing, the Node B shall include the *Enhanced FACH Capability* IE set to "Enhanced FACH Capable" for the Local Cell.]

[FDD - If the Local Cell is SixteenQAM UL-capable when it becomes Existing, then the Node B shall include the *SixteenQAM UL Capability* IE set to "SixteenQAM UL Capable" for the Local Cell.]

[1.28Mcps TDD - If the Local Cell is MBSFN Only Mode-capable when it becomes Existing, the Node B shall include the MBSFN Only Mode Capability IE set to "MBSFN Only Mode Capable" for the Local Cell.]

[FDD - If the Local Cell is F-DPCH Slot Format-capable when it becomes Existing, then the Node B shall include the *F-DPCH Slot Format Capability* IE set to "F-DPCH Slot Format Capable" for the Local Cell.]

[1.28Mcps TDD - If the Local Cell is SixtyfourQAM DL-capable when it becomes Existing, then the Node B shall include the SixtyfourQAM DL Capability IE set to "SixtyfourQAM DL Capable" for the Local Cell.]

[FDD - If the Local Cell is Common E-DCH-capable when it becomes Existing, the Node B shall include the *Common E-DCH Capability* IE set to "Common E-DCH Capable" for the Local Cell.]

If the Local Cell is E-DPCCH Power Boosting-capable when it becomes Existing, the Node B shall include the *E-DPCCH Power Boosting Capability* IE set to "E-DPCCH Power Boosting Capable" for the Local Cell.

[FDD - If the Local Cell is both SixtyfourQAM DL-capable and MIMO-capable when it becomes Existing, then the Node B shall include the *SixtyfourQAM DL and MIMO Combined Capability* IE set to "SixtyfourQAM DL and MIMO Combined Capable" for the Local Cell when Combined SixtyfourQAM DL and MIMO is supported.] [1.28Mcps TDD - If the Local Cell is Enhanced FACH-capable when it becomes Existing, the Node B shall include the *Enhanced FACH Capability* IE set to "Enhanced FACH Capable" for the Local Cell.]

[1.28Mcps TDD - The Node B shall include the *Enhanced PCH Capability* IE set to "Enhanced PCH Capable" for every Enhanced PCH-capable Local Cell.]

[1.28Mcps TDD - The Node B shall include the *Enhanced UE DRX Capability LCR* IE set to "Enhanced UE DRX Capable "for every Enhanced UE DRX Capable Local Cell.]

[FDD - If the Local Cell is Multi Cell Capable when it becomes Existing, the Node B shall include the *Multi Cell Capability Info* IE and set the *Multi Cell Capability* IE value to "Multi Cell Capable" for the Local Cell, and if the cell can be the serving HS-DSCH then the possible cells (same sector) that can act as secondary serving HS-DSCH shall be listed in the *Possible Secondary Serving Cell List* IE.]

[1.28Mcps TDD - If the Local Cell is both HSDPA-capable and E-DCH-capable when it becomes Existing, then the Node B shall include the *Continuous Packet Connectivity DRX Capability LCR* IE set to "Continuous Packet Connectivity DRX Capable" for the Local Cell when Continuous Packet Connectivity DRX is supported.]

[1.28Mcps TDD - If the Local Cell is both HSDPA-capable and E-DCH-capable when it becomes Existing, then the Node B shall include the *Semi-Persistent scheduling Capability LCR* IE set to "Semi-Persistent scheduling Capable" for the Local Cell when Semi-Persistent scheduling operation is supported.][1.28Mcps TDD- If the Local Cell is MIMO-capable when it becomes Existing, then the Node B shall include the *MIMO Capability* IE set to "MIMO Capable" for the Local Cell.]

[1.28Mcps TDD - If the Local Cell is both SixtyfourQAM DL-capable and MIMO-capable when it becomes Existing, then the Node B shall include the *SixtyfourQAM DL and MIMO Combined Capability* IE set to "SixtyfourQAM DL and MIMO Combined Capable" for the Local Cell when Combined SixtyfourQAM DL and MIMO is supported.] [FDD - If the Local Cell is Enhanced UE DRX-capable when it becomes Existing, the Node B shall include the *Enhanced UE DRX Capability* IE set to "Enhanced UE DRX Capable" for the Local Cell.]

[FDD - If the Local Cell is MIMO-capable and supports the MIMO Power Offset For S-CPICH Capability when it becomes Existing, the Node B shall include the *MIMO Power Offset For S-CPICH Capability* IE set to "S-CPICH Power Offset Capable" for the Local Cell.]

[FDD - If the Local Cell is MIMO-capable and supports DL control channels in transmit diversity for MIMO UEs (when MIMO is active and P-CPICH is not transmitted in diversity mode [7]) when it becomes Existing, the Node B shall include the *TX Diversity on DL Control Channels by MIMO UE Capability* IE set to "DL Control Channel Tx Diversity for MIMO UE with non-diverse P-CPICH Capable".]

[FDD - If the local cell is capable of at least one feature listed in 9.2.2.122 when it becomes existing, the Node B shall include the *Cell Capability Container* IE and indicate the capabilities listed in 9.2.2.122 for the local cell.]

[FDD - If the Local Cell, when it becomes Existing, is MIMO-capable and configuration of the precoding weight set restriction defined in [18] is preferred, the Node B may include the *Precoding Weight Set Restriction* IE set to "Preferred" for the Local Cell.]

#### **Local Cell Deletion:**

When a Local Cell is to be deleted in the Node B, i.e. becomes Not Existing, the Node B shall withdraw the Local Cell from the CRNC by sending a RESOURCE STATUS INDICATION message containing a "No Failure" Indication, the *Local Cell ID* IE and the *Add/Delete Indicator* IE set to "Delete". The Node B shall not withdraw a previously configured cell at the Node B that the CRNC had configured using the Cell Setup procedure, until the CRNC has deleted that cell at the Node B using the Cell Delete procedure.

## Capability Change of a Local Cell:

When the capabilities of a Local Cell change at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message containing a "Service Impacting" Indication and the *Local Cell ID* IE.

The Node B shall include the Minimum DL Power Capability IE when it is known by the Node B.

If the maximum DL power capability of the Local Cell has changed, the new capability shall be indicated in the *Maximum DL Power Capability* IE.

If the DL capability for supporting the minimum spreading factor has changed, the new capability shall be indicated in the *Minimum Spreading Factor* IE.

[TDD - If the availability of the Reference clock connected to a Local Cell has changed, the new availability condition shall be indicated in the *Reference Clock Availability* IE.]

The Cause IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

If the internal resource capabilities of the Local Cell are affected, it shall be reported in the following way:

- If the internal resource capabilities of the Local Cell are modelled as shared resources between Uplink and Downlink, the new capacity shall be reported in the *DL Or Global Capacity Credit* IE.
- If the internal resource capabilities of the Local Cell are modelled independently in the Uplink and Downlink direction, then the *DL Or Global Capacity Credit* IE and the *UL Capacity Credit* IE shall be present in the RESOURCE STATUS INDICATION.

If the Capacity Consumption Law for Common Channels has changed for the Local Cell, the new law shall be reported by the Node B in the *Common Channels Capacity Consumption Law* IE.

If the Capacity Consumption Law for Dedicated Channels has changed for the Local Cell, the new law shall be reported by the Node B in the *Dedicated Channels Capacity Consumption Law* IE.

[FDD - If the Capacity Consumption Law for E-DCH has changed for the Local Cell, the new law shall be reported by the Node B in the *E-DCH Capacity Consumption Law* IE.]

[TDD - If the Capacity Consumption Law for E-DCH has changed for the Local Cell, the new law shall be reported by the Node B in the *E-DCH TDD Capacity Consumption Law* IE.]

If the HSDPA capability has changed for the Local Cell, the new capability shall be indicated in the *HSDPA Capability* IE.

If the HS-DSCH MAC-d PDU Size Capability has changed for the Local Cell, the new capability shall be indicated in the *HS-DSCH MAC-d PDU Size Capability* IE.

If the E-DCH capability has changed for the Local Cell, the new capability shall be indicated in the *E-DCH Capability* IE. [FDD - The Node B shall include the *E-DCH Capability* IE if any of the E-DCH TTI2ms, SF or HARQ Combining capabilities has changed for the E-DCH capable Local Cell.]

If the E-DCH MAC-d PDU Size Capability has changed for the Local Cell, the new capability shall be indicated in the *E-DCH MAC-d PDU Size Capability* IE.

If the MBMS capability has changed for the Local Cell, the new capability shall be indicated in the MBMS Capability IE.

[FDD - If the F-DPCH capability has changed for the Local Cell, the new capability shall be indicated in the *F-DPCH Capability* IE.]

[FDD - If the Continuous Packet Connectivity DTX-DRX capability has changed for the Local Cell that is both HSDPA-capable and E-DCH-capable, then the new capability shall be indicated in the *Continuous Packet Connectivity DTX-DRX Capability* IE. The Node B shall include the *Continuous Packet Connectivity DTX-DRX Capability* IE if the Max UE DTX Cycle supported by the Continuous Packet Connectivity DTX-DRX capable Local Cell has changed. If the Continuous Packet Connectivity HS-SCCH less capability has changed for the Local Cell that is both HSDPA-capable and E-DCH-capable, then the new capability shall be indicated in the *Continuous Packet Connectivity HS-SCCH less Capability* IE.]

[FDD - If the MIMO capability has changed for the Local Cell, then the new capability shall be indicated in the MIMO Capability IE.]

[FDD - If the SixtyfourQAM DL capability has changed for the Local Cell, then the new capability shall be indicated in the SixtyfourQAM DL Capability IE.]

- [FDD If the Enhanced FACH capability has changed for the Local Cell, the new capability shall be indicated in the *Enhanced FACH Capability* IE. The Node B shall include the *Enhanced FACH Capability* IE if the Enhanced PCH capability has changed for the Enhanced PCH capable Local Cell.]
- [FDD If the SixteenQAM UL capability has changed for the Local Cell, then the new capability shall be indicated in the SixteenQAM UL Capability IE.]
- [1.28Mcps TDD If the MBSFN Only Mode capability has changed for the Local Cell, the new capability shall be indicated in the MBSFN Only Mode Capability IE.]
- [FDD If the F-DPCH Slot Format capability has changed for the Local Cell, then the new capability shall be indicated in the *F-DPCH Slot Format Capability* IE.]
- [1.28Mcps TDD If the SixtyfourQAM DL capability has changed for the Local Cell, then the new capability shall be indicated in the SixtyfourQAM DL Capability IE.]
- [FDD If the Common E-DCH capability has changed for the Local Cell, the new capability shall be indicated in the *Common E-DCH Capability* IE. The Node B shall include the *Common E-DCH Capability* IE if the E-AI capability has changed for the Common E-DCH capable Local Cell. The Node B shall include the *Common E-DCH Capability* IE if the HS-DPCCH capability for Common E-DCH has changed for the Common E-DCH capable Local Cell.]
- If the Support for E-DPCCH Power Boosting Capability has changed for the Local Cell, the new capability shall be indicated in the *E-DPCCH Power Boosting Capability* IE.
- [FDD If the SixtyfourQAM DL and MIMO Combined capability has changed for the Local Cell that is both SixtyfourQAM DL-capable and MIMO-capable, then the new capability shall be indicated in the SixtyfourQAM DL and MIMO Combined Capability IE.]
- [1.28Mcps TDD If the Enhanced FACH capability has changed for the Local Cell, the new capability shall be indicated in the *Enhanced FACH Capability* IE. The Node B shall include the *Enhanced FACH Capability* IE if the Enhanced PCH capability has changed for the Enhanced PCH capable Local Cell.]
- [1.28Mcps TDD If the Enhanced PCH capability has changed for the local cell, the new capability shall be indicated in the *Enhanced PCH Capability* IE.]
- [1.28Mcps TDD If the Enhanced UE DRX capability has changed for the local cell, the new capability shall be indicated in the *Enhanced UE DRX Capability LCR* IE.]
- [FDD If the Multi Cell Capability and/or the possible secondary serving cells has changed for the Local Cell, the new capability shall be indicated in the *Multi Cell Capability Info*.]
- [1.28Mcps TDD If the Continuous Packet Connectivity DRX capability has changed for the Local Cell that is both HSDPA-capable and E-DCH-capable, then the new capability shall be indicated in the *Continuous Packet Connectivity DRX Capability LCR* IE. If the Semi-Persistent scheduling operation capability has changed for the Local Cell that is both HSDPA-capable and E-DCH-capable, then the new capability shall be indicated in the *Semi-Persistent scheduling Capability LCR* IE.]
- [1.28Mcps TDD- If the MIMO capability has changed for the Local Cell, then the new capability shall be indicated in the *MIMO Capability* IE.]
- [1.28Mcps TDD– If the SixtyfourQAM DL and MIMO Combined capability has changed for the Local Cell that is both SixtyfourQAM DL-capable and MIMO-capable, then the new capability shall be indicated in the SixtyfourQAM DL and MIMO Combined Capability IE.]
- [FDD If the Enhanced UE DRX capability has changed for the Local Cell, the new capability shall be indicated in the *Enhanced UE DRX Capability* IE.]
- [FDD If the support for MIMO Power Offset For S-CPICH Capability has changed for the Local Cell, the new capability shall be indicated in the MIMO Power Offset For S-CPICH Capability IE.]
- [FDD If the support for DL control channels in transmit diversity for MIMO UEs (when MIMO is active and P-CPICH is not transmitted in diversity mode [7]) has changed for the Local Cell, the new capability shall be indicated in the *TX Diversity on DL Control Channels by MIMO UE Capability* IE.]
- [FDD If any of the capabilities indicated 9.2.2.122 has changed for the Local Cell, the new capabilities shall be indicated in the *Cell Capability Container* IE.]

[FDD - If the preference regarding configuration of the precoding weight set restriction defined in [18] has changed for the Local Cell, the new value shall be indicated in the *Precoding Weight Set Restriction* IE.]

### Capability Change of a Cell:

When the capabilities and/or resource operational state of a cell changes at the Node B, the Node B shall report the new capability and/or resource operational state by sending a RESOURCE STATUS INDICATION message containing a "Service Impacting" Indication, the *Resource Operational State* IE and the *Availability Status* IE. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

## Capability Change of a Common Physical Channel and/or Common Transport Channel:

The Node B shall not delete any common or dedicated channels due to the cell being "Disabled". For all affected common and dedicated channels, the Node B shall report the impact to the CRNC with the relevant procedures.

When the capabilities and/or resource operational state of common physical channels and/or common transport channels have changed, the Node B shall report the new capability and/or resource operational state by sending a RESOURCE STATUS INDICATION message containing a "Service Impacting" Indication, the *Resource Operational State* IE and the *Availability Status* IE set to appropriate values for the affected channel(s). The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

When a power value for a common physical channel and/or a common transport channel becomes beyond the supported power value range due to a change in capability in the Node B, it shall be reported to the CRNC in the RESOURCE STATUS INDICATION message, with the *Resource Operational State* IE set to "Enabled", the *Availability Status* IE set to "Degraded" and the *Cause* IE set to "Power level not supported". Affected channels shall use the nearest power value that is supported.

## [1.28Mcps TDD - Capability Change of a UpPCH channel:]

When the capabilities of UpPCH channels which are not configured in the timeslot of UpPTS on one or multiple frequencies have changed, the Node B may include the *UpPCH Information LCR* IE in the RESOURCE STATUS INDICATION message.

## **Capability Change of a Communication Control Port:**

When the resource operational state of a Communication Control Port has changed, the Node B shall report the new resource operational state by sending a RESOURCE STATUS INDICATION message containing a "Service Impacting" Indication and the *Communication Control Port ID* IE. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

# **Capability Change of HS-DSCH Resources:**

When the resource operational state of the HS-DSCH resources has changed, the Node B shall report the new resource operational state by sending a RESOURCE STATUS INDICATION message containing a "Service Impacting" Indication. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

[1.28Mcps TDD - For a multi-frequency cell, the Node B may include the *UARFCN* IE in the *HS-DSCH Resources Information* IE to report the status of the HS-DSCH resources on the indicated frequency, the Node B may also not include any *UARFCN* IE in the *HS-DSCH Resources Information* IE to report the status of the HS-DSCH resources for the whole cell.]

#### **Capability Change of E-DCH Resources:**

When the resource operational state of the E-DCH resources has changed, the Node B shall report the new resource operational state by sending a RESOURCE STATUS INDICATION message containing a "Service Impacting" Indication. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to the appropriate value.

[1.28Mcps TDD - For a multi-frequency cell, the Node B may include the *UARFCN* IE in the *E-DCH Resources Information* IE to report the status of the E-DCH resources on the indicated frequency, the Node B may also not include any *UARFCN* IE in the *E-DCH Resources Information* IE to report the status of the E-DCH resources for the whole cell.]

# **Capability Change of a Local Cell Group:**

When the resource capabilities of a Local Cell Group change at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message containing a "Service Impacting" Indication and the *Local* 

Cell Group Information IE reporting the change. The Cause IE in the RESOURCE STATUS INDICATION message shall be set to an appropriate value. If the RESOURCE STATUS INDICATION message contains both the DL Or Global Capacity Credit IE and the UL Capacity Credit IE, then the internal resource capabilities of the Node B are modelled independently in the Uplink and Downlink direction. If the UL Capacity Credit IE is not present, then the internal resource capabilities of the Node B are modelled as shared resources between Uplink and Downlink.

If the Capacity Consumption Law for Common Channels has changed for the Local Cell Group, the new law shall be reported by the Node B in the *Common Channels Capacity Consumption Law* IE.

If the Capacity Consumption Law for Dedicated Channels has changed for the Local Cell Group, the new law shall be reported by the Node B in the *Dedicated Channels Capacity Consumption Law* IE.

[FDD - If the Capacity Consumption Law for E-DCH has changed for the Local Cell Group, the new law shall be reported by the Node B in the *E-DCH Capacity Consumption Law* IE.]

[TDD - If the Capacity Consumption Law for E-DCH has changed for the Local Cell Group, the new law shall be reported by the Node B in the *E-DCH TDD Capacity Consumption Law* IE.]

## Capability Change of a Power Local Cell Group:

When the power capability of a Power Local Cell Group changes at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message with the *Indication Type* IE set equal to "Service Impacting" and the *Power Local Cell Group Information* IE reporting the change. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to an appropriate value. In this case, the Node B shall also include the *Maximum DL Power Capability* IE in the *Local Cell Information* IE for all the Local Cells belonging to the concerned Power Local Cell Group. Furthermore, the sum of the Maximum DL Power Capability of all the Local Cells belonging to the same Power Local Cell Group shall not exceed the Maximum DL Power Capability of the concerned Power Local Cell Group.

[1.28Mcps TDD - For a multi-frequency cell, when a cell has been successfully setup but a secondary frequency failure has occurred, the Node B shall report the status of the secondary frequency indicated by *UARFCN* IE on which the failure occurred by immediately sending a RESOURCE STATUS INDICATION message with the *Indication Type* IE set equal to "Service Impacting", the *Resource Operational State* IE and the *Availability Status* IE. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to an appropriate value.]

## General:

When the RESOURCE STATUS INDICATION message is used to report an error, only one cause value for all reported objects can be sent in one message. When the RESOURCE STATUS INDICATION message is used to clear errors, only all errors for one object can be cleared per message. It is not possible to clear one out of several errors for one object.

[1.28Mcps TDD - For a multi-frequency cell, the Node B should report the status of the resources used for each frequency. A reporting method can be found in Annex E.]

## 8.2.15.3 Abnormal Conditions

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# 8.2.16 System Information Update

## 8.2.16.1 General

The System Information Update procedure performs the necessary operations in order for the Node B to apply the correct scheduling of and/or to include the appropriate contents to the system information segments broadcast on the BCCH.

# 8.2.16.2 Successful Operation

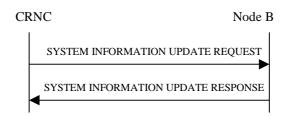


Figure 22: System Information Update procedure, Successful Operation

The procedure is initiated with a SYSTEM INFORMATION UPDATE REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

The Node B shall consider the requested updates to the BCCH schedule in the same order as the MIB/SB/SIB information is included in the SYSTEM INFORMATION UPDATE REQUEST message.

If the SYSTEM INFORMATION UPDATE REQUEST message includes the *BCCH Modification Time* IE, the updates to the BCCH schedule (possibly consisting of IB occurrence additions, IB occurrence deletions and IB occurrence contents updates) indicated in the SYSTEM INFORMATION UPDATE REQUEST message shall be applied by the Node B at the first time instance starting from the SFN value set by the *BCCH Modification Time* IE. If no *BCCH Modification Time* IE is included, the updates to the BCCH schedule shall be applied as soon as possible.

#### **Information Block addition:**

If the SYSTEM INFORMATION UPDATE REQUEST message includes segments of a certain MIB/SB/SIB, the Node B shall assume that all segments for that Information Block are included in the message and ordered with increasing Segment Index (starting from 0). For each included segment, segment type information and *IB SG POS* IE are also given in the SYSTEM INFORMATION UPDATE REQUEST message.

The Node B shall determine the correct cell system frame number(s) (SFN) for transmission of the segments of system information, from the scheduling parameters provided in the SYSTEM INFORMATION UPDATE REQUEST message. The SFN for transmitting the segments shall be determined by the *IB SG REP* IE and *IB SG POS* IE such that:

- SFN mod IB\_SG\_REP = IB\_SG\_POS

If the SYSTEM INFORMATION UPDATE REQUEST message contains Master Information Block (MIB) segments in addition to SIB or SB segments, the MIB segments shall first be sent in the physical channel by the Node B. Once these MIB segments have been sent in the physical channel, the updated SB/SIB segments shall then be sent in the physical channel.

Only if the inclusion of each new IB segment in the BCCH schedule leads to a valid segment combination according to [18], the Node B shall accept the system information update.

If the *SIB Originator* IE value is set to "Node B", the Node B shall create the SIB segment of the SIB type given by the *IB Type* IE and autonomously update the SIB segment and apply the scheduling and repetition as given by the *IB SG REP* IE and *IB SG POS* IE.

SIBs originating from the Node B can only be SIBs containing information that the Node B can obtain on its own.

#### **Information Block deletion:**

If an IB Deletion is indicated in an instance of *MIB/SB/SIB information* IE in the SYSTEM INFORMATION UPDATE REQUEST message, the Node B shall delete the IB indicated by the *IB Type* IE and *IB OC ID* IE from the transmission schedule on BCCH.

## **Information Block update:**

If the SYSTEM INFORMATION UPDATE REQUEST message contains segments for an IB without *IB SG REP* IE and *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID which is not requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB segments are included, then the Node B shall only update the contents of the IB segments without any modification in segment scheduling.

If the Node B successfully completes the updating of the physical channel scheduling cycle according to the parameters given in the SYSTEM INFORMATION UPDATE REQUEST message, it shall respond to the CRNC with a SYSTEM INFORMATION UPDATE RESPONSE message.

# 8.2.16.3 Unsuccessful Operation

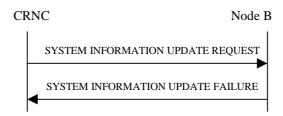


Figure 23: System Information Update procedure, Unsuccessful Operation

If the Node B is unable to update the physical channel scheduling cycle according to all the parameters given in the SYSTEM INFORMATION UPDATE REQUEST message, it shall respond with a SYSTEM INFORMATION UPDATE FAILURE message with an appropriate cause value.

The Node B shall not incorporate any of the requested changes into the physical channel scheduling cycle, and the previous system information configuration shall remain intact.

Typical cause values are:

#### **Radio Network Layer Cause:**

- SIB Origination in Node B not Supported

#### **Miscellaneous Cause:**

- Hardware failure
- Control Processing overload
- O&M Intervention

## 8.2.16.4 Abnormal Conditions

The Node B shall reject, with the cause value "SIB origination in Node B not supported", requests for Node B originated system information blocks that make use of a value tag.

The Node B shall reject the requested update with cause value "BCCH scheduling error" if:

- After having handled a certain MIB/SB/SIB information IE repetition, an illegal BCCH schedule results;
- If a MIB/SB/SIB Information IE repetition includes an IB SG REP IE or an IB SG POS IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID which is not requested to be deleted from the BCCH schedule by an IB deletion indicated in a MIB/SB/SIB information IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB addition is indicated. This rule shall apply even if the scheduling instructions in IB SG REP IE and IB SG POS IE were the same as the current scheduling instructions for the concerned IB;
- If a *MIB/SB/SIB Information* IE repetition includes no *IB SG REP* IE and *IB SG POS* IE and there is no IB in the BCCH schedule with the same IB Type and IB OC ID;
- If a *MIB/SB/SIB Information* IE repetition includes no *IB SG REP* IE and *IB SG POS* IE and there is already an IB in the BCCH schedule with the same IB Type and IB OC ID but it is requested to be deleted from the BCCH schedule by an IB deletion indicated in a *MIB/SB/SIB information* IE repetition present in the SYSTEM INFORMATION UPDATE REQUEST message before the IB addition is indicated.

# 8.2.17 Radio Link Setup

## 8.2.17.1 General

This procedure is used for establishing the necessary resources for a new Node B Communication Context in the Node B.

[FDD - The Radio Link Setup procedure is used to establish one or more radio links. The procedure establishes one or more DCHs on all radio links, and in addition, it can include the establishment of an HS-DSCH on one radio link and it can include the establishment of an E-DCH on one or more radio links.]

[TDD - The Radio Link Setup procedure is used to establish one radio link including one or more transport channels. The transport channels can be a mix of DCHs, DSCHs, and USCHs, or DCHs and an HS-DSCH, or DCHs, an HS-DSCH and an E-DCH, including also combinations where one or more transport channel types are not present.]

# 8.2.17.2 Successful Operation



Figure 24: Radio Link Setup procedure, Successful Operation

The procedure is initiated with a RADIO LINK SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception of the RADIO LINK SETUP REQUEST message, the Node B shall reserve necessary resources and configure the new Radio Link(s) according to the parameters given in the message.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

# **Transport Channels Handling:**

## DCH(s):

[TDD - If the *DCH Information* IE is present, the Node B shall configure the new DCH(s) according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.

If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.

[FDD - For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]

For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD - If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16]].

The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs as the FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs as the Time of Arrival Window Startpoint in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs as the Time of Arrival Window Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The received *Frame Handling Priority* IE specified for each Transport Channel should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new RL(s) has been activated.

If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.

[FDD - The *Diversity Control Field* IE indicates for each RL (except the first RL in the message) whether the Node B shall combine the concerned RL or not.

- If the Diversity Control Field IE is set to "May", the Node B shall decide for either of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL.
- If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

The signalled *Diversity Control Field* IE is applied to Dedicated Transport Channels (DCH) only. In case of E-DCH it shall always be assumed to be set to "Must". When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with.]

[FDD - In the RADIO LINK SETUP RESPONSE message, the Node B shall indicate for each RL with the Diversity Indication in the *RL Information Response* IE whether the RL is combined or not.]

- [FDD In case of not combining with a RL previously listed in the RADIO LINK SETUP RESPONSE
  message or for the first RL in the RADIO LINK SETUP RESPONSE message, and if the DCH Indicator
  For E-DCH-HSDPA Operation IE is not included in the RADIO LINK SETUP REQUEST message, the
  Node B shall:]
  - [FDD include in the *DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message for which the *Transport Bearer Not Requested Indicator* IE was not included the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]
  - [FDD include in the RADIO LINK SETUP RESPONSE message the *Transport Bearer Not Setup Indicator* IE for every DCH for which establishment of a transport bearer has not taken place as a result of information in the *Transport Bearer Not Requested Indicator* IE in the RADIO LINK SETUP REQUEST message.]
- [FDD For the first E-DCH RL in the RADIO LINK SETUP RESPONSE message, the Node B shall:]
  - [FDD include in the *E-DCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each E-DCH MAC-d flow of this RL.]
  - [FDD include in the RADIO LINK SETUP RESPONSE message the *Transport Bearer Not Setup Indicator* IE for every E-DCH MAC-d flow for which establishment of a transport bearer has not

taken place as a result of information in the *Transport Bearer Not Requested Indicator* IE in the RADIO LINK SETUP REQUEST message.]

- [FDD - Otherwise in case of combining, the *RL ID* IE indicates (one of) the RL(s) previously listed in this RADIO LINK SETUP RESPONSE message with which the concerned RL is combined and if the ALCAP is not used and the transport bearer for the DCH is already established, the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE included in the *RL Information* IE for a specific RL in the RADIO LINK SETUP REQUEST message, shall not be used. In case of combining an E-DCH RL, one of the RLs previously listed in this RADIO LINK SETUP RESPONSE message including the *E-DCH FDD Information Response* IE shall be regarded as the RL with which the concerned E-DCH RL is combined.]

[TDD - The Node B shall include in the *DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

[TDD - If an E-DCH has been established, the Node B shall include in the *E-DCH TDD Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each E-DCH MAC-d flow of the RL.]

In the case of a set of co-ordinated DCHs, the *Binding ID* IE and the *Transport Layer Address* IE shall be specified for only one of the DCHs in the set of co-ordinated DCHs [FDD - where the *Transport Bearer Not Requested Indicator* IE was not included].

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for a DCH, then the Node B shall not establish a transport bearer for the concerned DCH and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH in the RADIO LINK SETUP RESPONSE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for a DCH and:]

- [FDD if the Node B establishes a transport bearer for the concerned DCH, the Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the DCH being established.]
- [FDD if the Node B does not establish a transport bearer for the concerned DCH, the Node B shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH in the RADIO LINK SETUP RESPONSE message.]

## [TDD - DSCH(s)]:

[TDD - If the *DSCH Information* IE is present, the Node B shall configure the new DSCH(s) according to the parameters given in the message.]

[TDD - If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *DSCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DSCH.]

[TDD - The Node B shall include in the *DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and the *Transport Layer Address* IE for the transport bearer to be established for each DSCH of this RL.]

[TDD - If the RADIO LINK SETUP REQUEST message includes the *TNL QoS* IE in the *DSCH TDD Information* IE and if ALCAP is not used, the Node B may use the *TNL QoS* IE to determine the transport bearer characteristics to apply in the uplink for the related DSCH.]

## [TDD - USCH(s)]:

[TDD - If the *USCH Information* IE is present, the Node B shall configure the new USCH(s) according to the parameters given in the message.]

[TDD - If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *USCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the USCH.]

[TDD - If the RADIO LINK SETUP REQUEST message includes the *TNL QoS* IE in the *USCH Information* IE and if ALCAP is not used, the Node B may use the *TNL QoS* IE to determine the transport bearer characteristics to apply in the uplink for the related USCH.]

[TDD -If the *USCH Information* IE is present, the Node B shall include in the *USCH Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and the *Transport Layer Address* IE for the transport bearer to be established for each USCH of this RL.]

#### **HS-DSCH:**

If the HS-DSCH Information IE is present in the RADIO LINK SETUP REQUEST message, then:

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message. [FDD The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.] [1.28Mcps TDD- The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- The Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every HS-DSCH MAC-d flow being established.
- If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *HS-DSCH Information* IE for an HS-DSCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow.
- If the RADIO LINK SETUP REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK SETUP REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK SETUP REQUEST message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer received in RADIO LINK SETUP REQUEST in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]

- [FDD If the RADIO LINK SETUP REQUEST message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the HARQ Preamble Mode IE in the HS-DSCH Information IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the HARQ Preamble Mode Activation Indicator IE in the HS-DSCH Information Response IE in the RADIO LINK SETUP RESPONSE message. If the HARQ Preamble Mode IE is not included or if the mode 0 is applied, then the Node B shall not include the HARQ Preamble Mode Activation Indicator IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *HS-SICH SIR Target* IE in the *HS-DSCH Information* IE, the Node B shall use this value to determine the HS-SICH SIR Target. The *HS-SICH SIR Target* IE indicates the received UL SIR target of HS-SICH NACK for this UE.]
- If the RADIO LINK SETUP REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK SETUP REQUEST message, then the Node B shall activate the resources that are allocated for the new serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC.]
- [FDD If the *MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B shall activate the MIMO mode for the HS-DSCH Radio Link and the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the RADIO LINK SETUP RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B may use: ]

- [FDD a different HS-SCCH in consecutive TTIs for this UE]
- [FDD HS-SCCH orders for the case of HS-SCCH-less operation to this UE]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE the Node B may use the supported HSDPA functions for this UE.
- [1.28Mcps TDD If the *TSN-Length* IE is included in the *HS-DSCH TDD Information* IE, then the IE is used to indicate the TSN bits applied to the MAC-hs PDU frame.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *Number of Supported Carriers* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information to allocate HSDPA resources over multiple carriers for the UE.]
- [1.28Mcps TDD For a multi-frequency cell, if the RADIO LINK SETUP REQUEST message includes the *Multi-carrier HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information together with the *HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE to allocate HSDPA resources over multiple carriers for the UE.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH over multiple carriers and include the HS-SCCH Specific Information Response LCR per UARFCN IE in the HS-DSCH TDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B shall include the *HARQ Memory Partitioning per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to apply HSDPA resources distributed over multiple carriers, the Node B may indicate the number of carriers actually used by the UE and include the *Multi-Carrier number* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B may include the *UsedFrequency* IE in the *HS-SCCH Specific Information Response LCR* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B may include the *UARFCN* IE in the *HS-SCCH Specific Information Response LCR per UARFCN* IE in the RADIO LINK SETUP RESPONSE message.]
  - [1.28 Mcps TDD If the MIMO Activation Indicator IE is included in the HS-DSCH TDD Information IE, then, the Node B shall activate the MIMO mode for the HS-DSCH Radio Link, decide the SF mode for HS-PDSCH dual stream and include the MIMO SF Mode for HS-PDSCH dual stream IE in the HS-DSCH TDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- If the RADIO LINK SETUP REQUEST message includes the *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the *DL RLC PDU Size Format* IE may be used by the Node B to determine the allocated capacity on user plane as described in [24].

## [FDD - Secondary Serving HS-DSCH:]

[FDD - If the *Additional HS Cell Information RL Setup* IE is present in the RADIO LINK SETUP REQUEST message, then:]

- [FDD The Node B shall setup the requested HS-PDSCH resources on the secondary serving HS-DSCH Radio Link indicated by the HS-PDSCH RL ID IE. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE, then the Node B may use this value to

- determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and include the *HS-SCCH Specific Secondary Serving Information Response* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK SETUP REQUEST message, then the Node B shall activate the resources that are allocated for the new secondary serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE with value set to "not allowed", then the Node B shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If Sixtyfour QAM will not be used for the secondary serving HS-DSCH Radio Link, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]

#### [FDD - E-DCH]:

[FDD - If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DCH Minimum Set E-TFCI* IE the Node B shall use the value for the related resource allocation operation.]

[FDD - If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DPDCH Power Interpolation* IE, the Node B shall use the value to determine the applicable E-DPDCH power formula defined in [10]. If the *E-DPDCH Power Interpolation* IE is not present, the Node B shall use the E-DPDCH power extrapolation formula defined in [10].]

[FDD - If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the Node B shall use the information according to [10]. If the *E-TFCI Boost Information* IE is not present, the Node B shall use the E-TFCI BetaEC Boost value "127" in the algorithm defined in [10].]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *E-DPCH Information* IE, which contains the *Minimum Reduced E-DPDCH Gain Factor* IE, then the Node B shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the Node B Communication Context, the Node B may use the default value defined in [18]. ]

[FDD - If the E-DCH FDD Information IE is present in the RADIO LINK SETUP REQUEST message:]

- [FDD The Node B shall setup the requested E-DCH resources on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *RL specific E-DCH FDD Information* IE for an E-DCH MAC-d flow, then if the *Transport Bearer Not Requested Indicator* IE is not included for this E-DCH MAC-d flow, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow. The Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for every E-DCH MAC-d flow being established for which the *Transport Bearer Not Requested Indicator* IE was not included.]

- [FDD If the RADIO LINK SETUP REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for an E-DCH MAC-d flow, then the Node B shall not establish a transport bearer for the concerned E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the Transport Bearer Not Requested Indicator IE set to "Transport Bearer may not be Established" for an E-DCH MAC-d flow and:]
  - [FDD if the Node B establishes a transport bearer for the concerned E-DCH MAC-d flow, the Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the E-DCH MAC-d flow being established.]
  - [FDD if the Node B does not establish a transport bearer for the concerned E-DCH MAC-d flow, the Node B shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions for the related reordering queue.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK SETUP REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If in the RADIO LINK SETUP REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" the Node B shall assume scheduled grants being configured for the concerned E-DCH MAC-d flow.]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD The Node B may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE and the Node B may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK SETUP RESPONSE message for every RL indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this Node B]
  - [FDD The Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding E-AGCH in the E-DCH FDD DL Control Channel Information IE in the RADIO LINK SETUP RESPONSE message.]

- [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK SETUP RESPONSE message for the initial grant for the serving E-DCH RL.]
- [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK SETUP RESPONSE message for the serving E-DCH RL.]
- FDD If the RADIO LINK SETUP REQUEST message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH ReferencePower Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK SETUP REQUEST message, then the Node B shall activate the resources that are allocated for the new serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the SixteenQAM UL Operation Indicator IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the SixteenQAM UL Operation Indicator IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-RNTI* IE in the *E-DPCH Information* IE but does not include the *E-RNTI* IE in the *RL Information* IE, the Node B shall use the

information to detect the information related to the E-RNTI which is configured in the Node B when the UE was in Cell FACH state.]

## [FDD - E-DCH - HS-DSCH]:

[FDD - If the RADIO LINK SETUP REQUEST message includes the DCH Indicator For E-DCH-HSDPA Operation IE, then the Node B shall ignore the DCH Information IE in the RADIO LINK SETUP REQUEST message.]

## [TDD - E-DCH]:

[TDD - If the [3.84Mcps TDD - *E-DCH Information* IE] [1.28Mcps TDD - *E-DCH Information* 1.28Mcps IE][7.68Mcps TDD - *E-DCH Information* 7.68Mcps IE]is present in the RADIO LINK SETUP REQUEST message:]

- [TDD The Node B shall setup the requested E-DCH resources on the Radio Link indicated by the *E-DCH Serving RL* IE.]
- [TDD If the *TNL QoS* IE is included in the *E-DCH MAC-d Flows Information TDD* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *E-DCH MAC-d Flows Information TDD* IE for an E-DCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flows Information TDD* IE, the Node B shall use this information for the related resource allocation operation.]
- [TDD If in the RADIO LINK SETUP REQUEST message the *E-DCH Grant Type* IE in the *E-DCH MAC-d Flows Information TDD* IE is set to "Non-scheduled" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants are configured for that E-DCH MAC-d flow and shall use the information within the [3.84Mcps *E-DCH Non-scheduled Grant Information TDD* IE] [1.28Mcps *E-DCH Non-scheduled Grant Information LCR TDD* IE] [7.68Mcps *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE], if included, for the related resource allocation operation.]
- [TDD If in the RADIO LINK SETUP REQUEST message the *E-DCH Grant Type* IE in the *E-DCH MAC-d Flows Information TDD* IE is set to "Scheduled" the Node B shall assume that it may issue scheduled grants for the concerned E-DCH MAC-d flow.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows Information TDD* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions for the related queue.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *MAC-es Maximum Bit Rate LCR* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows Information TDD* IE, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]
- [3.84Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH TDD Maximum Bitrate* IE in the *E-DCH TDD Information* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]

- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Physical Layer Category LCR* IE or *Extended E-DCH Physical Layer Category LCR* IE in the *E-DCH TDD Information LCR* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [7.68Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH TDD Maximum Bitrate* 7.68Mcps IE in the *E-DCH TDD Information* 7.68Mcps IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE in the [3.84Mcps TDD *E-DCH TDD Information* IE] [7.68Mcps TDD *E-DCH TDD Information 1.68Mcps* IE][1.28Mcps TDD *E-DCH TDD Information LCR* IE], then if the Node B could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE in the [3.84Mcps TDD *E-DCH TDD Information* IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] [7.68Mcps TDD *E-DCH TDD Information 7.68Mcps* IE], then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *Maximum Number of Retransmission for Scheduling Info LCR* IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE in the *E-DCH TDD Information LCR* IE, then the Node B shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]
- [3.84Mcps TDD and 7.68Mcps TDD The Node B shall allocate an E-RNTI identifier and include the E-RNTI identifier and the E-AGCH(s), [1.28Mcps E-HICHs] assigned in the *E-DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

## **Physical Channels Handling:**

# [FDD - Compressed Mode]:

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the information about the Transmission Gap Pattern Sequences to be used in the Compressed Mode Configuration. This Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or the Node B Communication Context is deleted.]

[FDD - If the *Downlink Compressed Mode Method* IE in one or more Transmission Gap Pattern Sequence is set to "SF/2" in the RADIO LINK SETUP REQUEST message, the Node B shall use or not the alternate scrambling code as indicated for each DL Channelisation Code in the *Transmission Gap Pattern Sequence Code Information* IE.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE, the Node B shall use the information to activate the indicated Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN* refers to the latest passed CFN with that value The Node B shall treat the received *TGCFN* IEs as follows:]

- [FDD If any received *TGCFN* IE has the same value as the received *CM Configuration Change CFN* IE, the Node B shall consider the concerned Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD If any received *TGCFN* IE does not have the same value as the received *CM Configuration Change CFN* IE but the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN* IE has already passed, the Node B shall consider the concerned Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD For all other Transmission Gap Pattern Sequences included in the *Active Pattern Sequence Information* IE, the Node B shall activate each Transmission Gap Pattern Sequence at the first CFN after

the CM Configuration Change CFN with a value equal to the *TGCFN* IE for the Transmission Gap Pattern Sequence.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE and the concerned Node B Communication Context is configured to use F-DPCH in the downlink, the Node B shall not transmit the F-DPCH during the downlink transmission gaps according to [7]. But in all slots outside of the downlink transmission gaps the NodeB shall transmit the F-DPCH with the normal scrambling code and the assigned slot format, regardless of the configured downlink compressed mode method information and of the transmission gap pattern sequence code information, if existing.]

#### [FDD - DL Code Information]:

[FDD - When more than one DL DPDCH is assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number I*", the second to "*PhCH number 2*", and so on until the *pth* to "*PhCH number p*".]

#### [TDD - PDSCH RL ID]:

[TDD - If the *PDSCH RL ID* IE is included in RADIO LINK SETUP REQUEST message, the Node B shall use the PDSCH RL ID as an identifier for the PDSCH and/or PUSCH in this radio link.]

#### [FDD - Phase Reference Handling]:

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Primary CPICH Usage For Channel Estimation* IE and has the value "Primary CPICH shall not be used", the Node B shall assume that the UE is not using the Primary CPICH for channel estimation. If the RADIO LINK SETUP REQUEST message does not include the *Primary CPICH Usage For Channel Estimation* IE or includes the *Primary CPICH Usage For Channel Estimation* IE and has the value "Primary CPICH may be used", the Node B shall assume that the UE may use the Primary CPICH for channel estimation.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Secondary CPICH Information* IE, the Node B shall assume that the UE may use the Secondary CPICH indicated by the *Common Physical Channel ID* IE for channel estimation.]

#### General:

[FDD - If the *Propagation Delay* IE and optionally the *Extended Propagation Delay* IE are included, the Node B may use this information to speed up the detection of L1 synchronisation.]

[FDD - The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control.]

[1.28Mcps TDD - The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control according [19] and [21].]

[FDD - If the received *Limited Power Increase* IE is set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control.]

[1.28Mcps TDD - If the *UL CCTrCH Information* IE includes the *TDD TPC UL Step Size* IE, the Node B shall configure the uplink TPC step size according to the parameters given in the message.]

[1.28 Mcps TDD - The Node B shall configure the HS-SCCH TPC step size to the same value as the *TDD TPC DL Step Size* IE of the lowest numbered DL CCTrCH whose *DL CCTrCH Information* IE includes the *TDD TPC DL Step Size* IE.]

[1.28 Mcps TDD - If no *TDD TPC DL Step Size* IE is included in the *DL CCTrCH Information* IE, the Node B shall use the *E-AGCH TPC step size* IE in the *E-PUCH Information LCR* IE in the *E-DCH Information 1.28Mcps* IE for HS-SCCH inner loop power control related operation.]

[1.28Mcps TDD - If the *UL Timeslot Information LCR* IE includes the *PLCCH Information* IE, the Node B shall transmit TPC /SS bits on a PLCCH according to the parameters given in the message.]

# [FDD - DPCH Handling]:

[FDD - If the *UL DPDCH Indicator For E-DCH Operation* IE is set to "UL DPDCH not present", the *Min UL Channelisation Code Length* IE, the *Puncture Limit* IE and the *TFCS* IE within the *UL DPCH Information* IE shall be ignored and no UL DPDCH resources shall be allocated.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *DL DPCH Information* IE, then the Node B shall configure the concerned Node B Communication Context to use DPCH in the downlink, i.e. with a DL DPCCH and a DL DPDCH.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *F-DPCH Information* IE, then the Node B shall configure the concerned Node B Communication Context to use F-DPCH in the downlink, i.e. with transmission of only the TPC field.]

#### [FDD - Continuous Packet Connectivity Handling]:

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information* IE, then:]

- [FDD The Node B shall configure the concerned Node B Communication Context for DTX operation according to [10].]
- [FDD If *DRX Information* IE is included in the *Continuous Packet Connectivity DTX-DRX Information* IE, then the Node B shall configure the concerned Node B Communication Context for DRX operation according to [10].]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Information* IE, then:]

- [FDD The Node B shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for Continuous Packet Connectivity HS-SCCH less operation according to [10].]
- [FDD The Node B shall allocate the HS-PDSCH codes needed for HS-SCCH less operation and include the Continuous Packet Connectivity HS-SCCH less Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If at least one of *HS-PDSCH Second Code Support* IE is set to "True", then the Node B shall include *HS-PDSCH Second Code Index* IE in the RADIO LINK SETUP RESPONSE message.]

### [1.28 Mcps TDD - Continuous Packet Connectivity Handling]:

[1.28 Mcps TDD - If the RADIO LINK SETUP REQUEST message includes the *Continuous Packet Connectivity DRX Information LCR* IE, then the Node B shall take account into these parameters to decide the DRX operation related parameters and configure the concerned Node B Communication Context for DRX operation according to [21] and include the parameter(s) in the *Continuous Packet Connectivity DRX Information Response LCR* IE in the RADIO LINK SETUP RESPONSE message.]

[1.28 Mcps TDD - If the *Inactivity Threshold for UE DRX Cycle Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the NodeB may use this value to determine the Inactivity Threshold for UE DRX Cycle according to [21].]

[1.28 Mcps TDD - If the *Enabling Delay Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the Node B may use this value to determine the beginning of uplink transmission in the new configuration according to [21].]

[1.28 Mcps TDD - If the RADIO LINK SETUP REQUEST message includes the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then:]

- [1.28 Mcps TDD The Node B shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for HS-DSCH Semi-Persistent scheduling operation according to [21].]
- [1.28 Mcps TDD The Node B shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD If the *HS-DSCH Semi-Persistent Resource Reservation Indicator* IE is included in the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then the Node B shall include *Allcoated HS-PDSCH Semi-persistent resource* IE in the RADIO LINK SETUP RESPONSE message.]

- [1.28 Mcps TDD The Node B shall include the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD The Node B shall include the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK SETUP RESPONSE message.]

[1.28 Mcps TDD - If the RADIO LINK SETUP REQUEST message includes the *E-DCH Semi-Persistent scheduling Information LCR* IE, then:]

- [1.28 Mcps TDD The Node B shall configure the Serving E-DCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to [21].]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the Node B shall include *Allcoated E-DCH Semi-persistent resource* IE in the RADIO LINK SETUP RESPONSE message.]

## **Radio Link Handling:**

#### [FDD - Transmit Diversity]:

[FDD - When the *Diversity Mode* IE is set to "STTD" or "Closedloop mode1", the Node B shall activate/deactivate the Transmit Diversity for each Radio Link in accordance with the *Transmit Diversity Indication* IE]

[FDD - If the *Diversity Mode* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Setup* IE in the RADIO LINK SETUP REQUEST message, the Node B shall apply cell specific transmit diversity configuration and if the *Diversity Mode* IE is not set to "None" the Node B shall activate/deactivate the Transmit Diversity for the secondary serving HS-DSCH Radio Link in accordance with the *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information* IE.]

#### **DL Power Control:**

[FDD - The Node B shall start any DL transmission using the initial DL power specified in the message on each DL DPCH or on the F-DPCH of the RL until either UL synchronisation on the Uu interface is achieved for the RLS or Power Balancing is activated. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and the power control procedure (see subclause 8.3.7), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message. If the Node B Communication Context is configured to use DPCH in the downlink, during compressed mode, the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[FDD - If the *DPC Mode* IE is present in the RADIO LINK SETUP REQUEST message, the Node B shall apply the DPC mode indicated in the message and be prepared that the DPC mode may be changed during the lifetime of the RL. If the *DPC Mode* IE is not present in the RADIO LINK SETUP REQUEST message, DPC mode 0 shall be applied (see ref. [10]).]

[3.84 Mcps TDD and 7.68Mcps TDD - The Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall start any DL transmission on each DCH type CCTrCH using the initial CCTrCH DL power, as determined above, on each DL DPCH and on each Time Slot of the CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

[3.84 Mcps TDD and 7.68Mcps TDD - The Node B shall determine the maximum DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE.]

[3.84 Mcps TDD and 7.68Mcps TDD - The Node B shall determine the minimum DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE.]

[3.84Mcps TDD and 7.68Mcps TDD - The initial power, maximum power, and minimum power for DSCH type CCTrCH shall be determined as follows:

- If the DSCH type CCTrCH is paired with an uplink CCTrCH(s) for inner loop power control, the minimum, maximum and initial power for each PDSCH is determined in the same way as described above for DCH type CCTrCHs.
- If the DSCH type CCTrCH is not paired with an uplink CCTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCTrCHs. The minimum and initial powers, however, are subject to control by the CRNC via the frame protocol].

[1.28 Mcps TDD - The Node B shall determine the initial DL power for each timeslot within the DCH type CCTrCH by the following rule: If the *Initial DL Transmission Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the Initial DL Power and ignore the *DL Time Slot ISCP info LCR* IE, otherwise the initial DL Power is the *Initial DL Transmission Power* IE included in the *RL Information* IE and if *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall start any DL transmission on each timeslot within each DCH type CCTrCH using the initial DL power, as determined above, on each DL DPCH and on each timeslot of the CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

[1.28 Mcps TDD - The Node B shall determine the maximum DL power for each timeslot within the DCH type CCTrCH by the following rule: If the *Maximum DL Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE.]

[1.28 Mcps TDD - The Node B shall determine the minimum DL power for each timeslot within the DCH type CCTrCH by the following rule: If the *Minimum DL Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE.]

[1.28Mcps TDD - The Node B shall determine the initial power for each timeslot within the DSCH type CCTrCH by the following rule: If both the *CCTrCH Initial DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, and the *DL Time Slot ISCP Info LCR* IE, included in the *RL Information* IE, are included then the Node B shall use that power for the PDSCH and ignore the *Initial DL Transmission Power* IE included in the *RL Information* IE, otherwise the initial DL Power is the *Initial DL Transmission Power* IE included in the *RL Information* IE and if *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall start any DL transmission on each timeslot within each DSCH type CCTrCH using the initial DL power, as determined above, on each DL PDSCH and on each timeslot of the CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

[1.28 Mcps TDD - The Node B shall determine the maximum DL power for each timeslot within the DSCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE.]

[1.28 Mcps TDD - The Node B shall determine the minimum DL power for each timeslot within the DSCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE.]

[3.84Mcps TDD and 7.68Mcps TDD - If the *DL Time Slot ISCP Info* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged.]

[FDD - If the received *Inner Loop DL PC Status* IE is set to "Active", the Node B shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the Node B shall deactivate the inner loop DL power control for all RLs according to ref. [10].]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *DL Power Balancing Information* IE and the *Power Adjustment Type* IE is set to "Common" or "Individual", the Node B shall activate the power balancing, if activation of power balancing by the RADIO LINK SETUP REQUEST message is supported, according to subclause 8.3.7, using the *DL Power Balancing Information* IE. If the Node B starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing, i.e. *P*<sub>init</sub> shall be set to the power level indicated by the *Initial DL Transmission Power* IE.]

[FDD - If activation of power balancing by the RADIO LINK SETUP REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Activation Indicator* IE in the *RL Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

# [1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:

[1.28Mcps TDD - If the RADIO LINK SETUP REQUEST message contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]

### [1.28Mcps TDD - Power Control GAP:]

[1.28Mcps TDD - If the *Power Control GAP* IE is included in the RADIO LINK SETUP REQUEST message, the Node B may use the value for the power control for HS-SCCH and HS-SICH according to the [21].]

## [1.28Mcps TDD - E-UTRAN Inter-RAT measurement:]

[1.28Mcps TDD - If the RADIO LINK SETUP REQUEST message includes the Idle Interval Information IE, if supported, the Node B shall use the value for E-UTRAN Inter-RAT measurement according to the [18].]

## [1.28Mcps TDD - HS-DSCH-RNTI for FACH:]

[1.28Mcps TDD - If the RADIO LINK SETUP REQUEST message includes the *HS-DSCH-RNTI for FACH* IE, if supported, the Node B shall store this information and include the *E-RNTI for FACH* IE in the RADIO LINK SETUP RESPONSE message.]

### [FDD – HS-DSCH Preconfiguration for Enhanced HS Serving Cell Change]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *HS-DSCH Preconfiguration Setup* IE in the *RL Information* IE for a Radio Link not indicated by the *HS-PDSCH RL ID* IE the Node B shall if supported preconfigure the indicated cells for Enhanced HS Serving Cell Change according to [49]:

- [FDD The Node B shall preconfigure sets of HS-SCCH codes on the cells preconfigured for HS-DSCH, primary serving HS-DSCH cell, as well as on the secondary serving HS-DSCH cells. The primary serving HS-DSCH cell is designated through the *C-ID* IE part of the *RL Information* IE in the RADIO LINK SETUP REQUEST message. The list of secondary serving HS-DSCH cells is designated by the list of *C-ID*s in the *HS-DSCH Preconfiguration Setup* IE part of the *RL Information* IE in the RADIO LINK SETUP REQUEST message. ]
- [FDD The number of HS-SCCH codes to preconfigure for each cell may be optionally specified: ]

- [FDD - by the *Num Primary HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Setup* IE, for the primary serving HS-DSCH cell]
- [FDD - by the *Num Secondary HS-SCCH Codes* IE in the Secondary Cells IE in the *HS-DSCH Preconfiguration Setup* IE for each of the secondary serving HS-DSCH cells]
- [FDD If *Num Primary HS-SCCH Codes* IE or *Num Secondary HS-SCCH Codes* IE is not included in the message the number and distribution of codes on primary and any secondary cells shall be preconfigured to satisfy any limitations in [10].]
- [FDD The Node B shall return these codes in the Sets of HS-SCCH Codes IE in the HS-DSCH
   Preconfiguration Info IE in the RL Information Response IE of the RADIO LINK SETUP RESPONSE
   message or in the Successful RL Information Response IE of the RADIO LINK SETUP FAILURE
   message. ]
- [FDD The Node B shall use the first in the numbered list of the primary serving HS-DSCH cell"s HS-SCCH codes in the *HS-SCCH Preconfigured Codes* IE sent to the RNC to signal the Target Cell HS-SCCH Order defined in [18].
- [FDD The Node B shall include, in the HS-DSCH Preconfiguration Info IE in the RL Information Response IE in the RADIO LINK SETUP RESPONSE message or in the Successful RL Information Response IE of the RADIO LINK SETUP FAILURE message, IEs according to the rules defined for HS-DSCH Setup and: ]
  - [FDD - if *HARQ Preamble Mode* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *HARQ Preamble Mode Activation Indicator* IE]
  - [FDD - if *MIMO Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE ]
  - [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used in the preconfigured configuration the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell]
  - [FDD - if Sixtyfour QAM Usage Allowed Indicator is included in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE or in the HS-DSCH Preconfiguration Setup IE the SixtyfourQAM DL Usage Indicator IE for each preconfigured cell]
  - [FDD if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE]
  - [FDD - if the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the Node B shall store this information in the preconfigured configuration.]
  - [FDD - if the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the Node B may store this information in the preconfigured configuration.]
  - [FDD The Node B shall include in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK SETUP RESPONSE message or in the *Successful RL Information Response* IE of the RADIO LINK SETUP FAILURE message the *E-DCH FDD DL Control Channel Information* containing the preconfigured configuration of the E-DCH serving cell according to the rules defined for Serving E-DCH Radio Link Change as follows: ]
  - [FDD The Node B shall allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE.]
  - [FDD The Node B may configure for the preconfigured configuration the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving E-DCH RL and include these values in the *E-DCH FDD DL Control Channel Information* IE.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Non-Serving RL Preconfiguration Setup* IE in the *RL Information* IE and:]

- [FDD if the choice of *new Serving RL* is "New Serving RL in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE and/or *New non-serving RL E-DCH FDD DL Control Channel Information B* IE in the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK SETUP RESPONSE message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL Not in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information C* IE in the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK SETUP RESPONSE message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL in the Node B or New Serving RL Not in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE, the *New non-serving RL E-DCH FDD DL Control Channel Information B* IE and/or the *New non-serving RL E-DCH FDD DL Control Channel Information C* IE for the RL in the *Non-Serving RL Preconfiguration Info* IE in the RADIO LINK SETUP RESPONSE message.]

#### General:

If the RADIO LINK SETUP REQUEST message includes the *RL Specific DCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DCH or the set of co-ordinated DCHs.

The Node B shall start reception on the new RL(s) after the RLs are successfully established.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Synchronisation Indicator* IE, set to "Timing Maintained Synchronisation", the Node B shall use synchronisation procedure B according to subclause 4.3.2.4 in [10].]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Initial DL DPCH Timing Adjustment Allowed* IE, then the Node B may perform an initial DL DPCH Timing Adjustment (i.e. perform a timing advance or a timing delay with respect to the SFN timing) on a Radio Link. In this case, the Node B shall include, for the concerned Radio Link(s), the *Initial DL DPCH Timing Adjustment* IE in the *Radio Link Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *F-DPCH Slot Format* IE and if the Node B Communication Context is configured to use F-DPCH in the downlink, then the Node B shall use this information to configure the F-DPCH slot format of each RL according to [7].]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *E-RNTI* IE in the *RL Information* IE, the Node B shall use the information to detect the information related to the E-RNTI which is configured in the Node B when the UE was in Cell\_FACH state.]

#### [FDD - Radio Link Set Handling]:

[FDD - The *First RLS Indicator* IE indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC Pattern 01 Count* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]

[FDD - For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication Context. In case of E-DCH, the generation of E-HICH related information for RLs in different RL Sets shall not be common.]

[FDD - For all RLs having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication Context. In case of E-DCH, the generation of E-HICH information for all RLs in a RL Set shall be common.]

[FDD - The UL out-of-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the maximum value of the parameters N\_OUTSYNC\_IND and T\_RLFAILURE that are configured in the cells supporting the radio

links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters N\_INSYNC\_IND, that are configured in the cells supporting the radio links of the RL Set.]

[FDD - For each E-DCH RL which has or can have a common generation of E-RGCH information with another RL (current or future) when the Node B would contain the E-DCH serving RL, the Node B shall include the *E-DCH RL Set ID* IE in the RADIO LINK SETUP RESPONSE message. The value of the *E-DCH RL Set ID* IE shall allow the RNC to identify the E-DCH RLs that have or can have a common generation of E-RGCH information.]

#### **Response Message:**

If the RLs are successfully established, the Node B shall and respond with a RADIO LINK SETUP RESPONSE message.

After sending the RADIO LINK SETUP RESPONSE message the Node B shall continuously attempt to obtain UL synchronisation on the Uu interface.

For each RL for which the *Delayed Activation* IE is not included in the RADIO LINK SETUP REQUEST message, the Node B shall:

- [FDD start transmission on the DL DPDCH(s) of the new RL as specified in [16].]
- [TDD start transmission on the new RL immediately as specified in [16].]

For each RL for which the *Delayed Activation* IE is included in the RADIO LINK SETUP REQUEST message, the Node B shall:

- if the *Delayed Activation* IE indicates "Separate Indication":
  - not start any DL transmission for the concerned RL on the Uu interface;
- if the *Delayed Activation* IE indicates "CFN":
  - [FDD start transmission on the DL DPDCH(s) of the new RL as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
  - [TDD start transmission on the new RL at the CFN indicated in the Activation CFN IE as specified in [16].]

# 8.2.17.3 Unsuccessful Operation



Figure 25: Radio Link Setup procedure, Unsuccessful Operation

If the establishment of at least one radio link is unsuccessful, the Node B shall respond with a RADIO LINK SETUP FAILURE message. The message contains the failure cause in the *Cause* IE.

[FDD - If some radio links were established successfully, the Node B shall indicate this in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message. In this case, the Node B shall include the *Communication Control Port Id* IE in the RADIO LINK SETUP FAILURE message.]

[FDD - If the RL identified by the *HS-PDSCH RL ID* IE is a radio link in the Node B and this RL is successfully established, then the Node B shall include the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP FAILURE message.]

[FDD - If the RL identified by the *HS-PDSCH RL ID* IE in the *Additional HS Cell Information RL Setup* IE is a radio link in the Node B and this RL is successfully established, then the Node B shall include the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK SETUP FAILURE message. If the establishment of the RL identified by the *HS-PDSCH RL ID* IE in the *Additional HS Cell Information RL Setup* IE, i.e. secondary serving HS-DSCH Radio Link is unsuccessful but the establishment of the RL identified by the *HS-PDSCH RL ID* IE for the serving HS-DSCH Radio Link is successful, then the Node B shall indicate the unsuccessful secondary serving HS-DSCH Radio Link in the *Unsuccessful RL Information Response* IE in the RADIO LINK SETUP FAILURE message by setting the *RL ID* IE to the same value as the unsuccessful *HS-PDSCH RL ID* IE in the *Additional HS Cell Information RL Setup* IE.]

Typical cause values are as follows:

#### **Radio Network Layer Cause:**

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- Number of DL codes not supported
- Number of UL codes not supported
- UL SF not supported
- DL SF not supported
- Dedicated Transport Channel Type not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- [FDD DPC mode change not supported]
- Delayed Activation not supported
- F-DPCH not supported
- [FDD Continuous Packet Connectivity DTX-DRX operation not available]
- [FDD Continuous Packet Connectivity UE DTX Cycle not available]
- [FDD MIMO not available]
- E-DCH MAC-d PDU Size Format not available
- [FDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD Multi Cell operation not available.]
- [1.28Mcps TDD- MIMO not available]
- [1.28Mcps TDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD TX diversity for MIMO UE on DL Control Channels not available]
- [FDD Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available]

# **Transport Layer Cause:**

- Transport Resources Unavailable

#### **Miscellaneous Cause:**

- O&M Intervention
- Control processing overload
- HW failure

#### 8.2.17.4 Abnormal Conditions

[FDD - If the RADIO LINK SETUP REQUEST message contains the *Active Pattern Sequence Information* IE, but the *Transmission Gap Pattern Sequence Information* IE is not present, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD - or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Radio Link Setup procedure as failed and shall respond with a RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCH Information* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE or *RL Specific E-DCH Information* IE included in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "Must" [FDD - or the RL is combined with an E-DCH RL previously listed in the RADIO LINK SETUP RESPONSE message], the Node B shall regard the Radio Link Setup procedure as failed and respond with the RADIO LINK SETUP FAILURE message.

If ALCAP is not used, if the RADIO LINK SETUP REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "May", the Node B shall reject the Radio Link Setup procedure and respond with the RADIO LINK SETUP FAILURE message.

If ALCAP is not used, if the RADIO LINK SETUP REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "Must Not", the Node B shall reject the Radio Link Setup procedure and respond with the RADIO LINK SETUP FAILURE message.

If ALCAP is not used, if the RADIO LINK SETUP REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE for the first RL in the *RL Information* IE and/or [FDD - in the *RL Specific E-DCH Information* IE in the *RL Information* IE for the first E-DCH RL][TDD – in the *E-DCH MAC-d Flows Information TDD* IE], the Node B shall reject the Radio Link Setup procedure and respond with the RADIO LINK SETUP FAILURE message.

If ALCAP is not used, if the RADIO LINK SETUP REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE for an HS-DSCH MAC-d Flow in the *HS-DSCH MAC-d Flows Information* IE, the Node B shall reject the Radio Link Setup procedure and respond with the RADIO LINK SETUP FAILURE message.

[TDD - If ALCAP is not used, if the RADIO LINK SETUP REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE for a DSCH in the *DSCH TDD Information* IE and/or for an USCH in the *USCH Information* IE, the Node B shall reject the Radio Link Setup procedure and respond with the RADIO LINK SETUP FAILURE message.]

If the RADIO LINK SETUP REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes an *HS-PDSCH RL-ID* IE for a serving HS-DSCH not referring to one of the radio links to be established, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message contains the *HS-DSCH Information* IE and if the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, and the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE has the value "Indexed MAC-d PDU Size", the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message does not include the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, and the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE has the value "Flexible MAC-d PDU Size", the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

[FDD - If the RADIO LINK SETUP REQUEST message contains, for at least one logical channel, the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE and there exist a logical channel for which the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE is not present, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[TDD - If the RADIO LINK SETUP REQUEST message contains, for at least one logical channel, the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH Information* IE, and there exist a logical channel for which the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH Information* IE is not present, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Synchronisation Indicator* IE, set to "Timing Maintained Synchronisation", and if the *First RLS indicator* IE is set to "not first RLS", the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message contains the *HS-DSCH Information* IE and if the *Measurement Power Offset* IE is not present, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message contains the *F-DPCH Information* IE and the *DL DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Active Pattern Sequence Information* IE, which activates a transmission gap pattern sequence with an SF/2 downlink compressed mode method, and if the concerned NodeB Communication Context is configured to use DPCH in downlink and the Transmission Gap Pattern Sequence Code Information is not available for any Radio Link, the NodeB shall reject the Radio Link Setup procedure using the RADIO LINK SETUP FAILURE message with the cause value 'Invalid CM Settings'.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" and doesn"t include the *Secondary CPICH Information* IE, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes one of the *Not Used* IEs, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message contains the *E-DCH RL Indication* IE set to "E-DCH", but does not contain the *E-DCH FDD Information* IE, or if the message contains the *E-DCH FDD Information* IE, but does not contain the *E-DCH RL Indication* IE set to "E-DCH", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If the RADIO LINK SETUP REQUEST message contains the *HS-PDSCH RL ID* IE and the *Serving E-DCH RL* IE but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not configured to be in the same cell then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

[FDD - If the RADIO LINK SETUP REQUEST message contains the *HS-PDSCH RL ID* IE and the *E-DPCH Information* IE which includes the *HS-DSCH Configured Indicator* IE set as 'HS-DSCH not configured' then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message contains the *E-DPCH Information* IE but does not contain the *UL DPDCH Indicator For E-DCH Operation* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

- [FDD If the RADIO LINK SETUP REQUEST message contains the *Serving Cell Change CFN* IE, but neither the *Serving E-DCH RL* IE nor *HS-DSCH Information* IE is included, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *Transport Bearer Not Requested Indicator* IE for a DCH, but does not contain the *Unidirectional DCH indicator* IE set to "Uplink DCH only" in the *DCH Specific Info* IE for the DCH, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [1.28Mcps TDD For a multi-frequency cell, if the *UARFCN* IE is not included in the RADIO LINK SETUP REQUEST message, the Node B shall reject the procedure by sending the RADIO LINK SETUP FAILURE message.]
- [1.28Mcps TDD For the cell in which only one frequency is configured, if the UARFCN IE is included in the RADIO LINK SETUP REQUEST message, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the *UL DPCH Information* IE in the RADIO LINK SETUP REQUEST message contains the *UL DPCCH Slot Format* set to "4" but does not contain the *F-DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the *UL DPCH Information* IE in the RADIO LINK SETUP REQUEST message contains the *UL DPCCH Slot Format* set to "0" or "2" and the *Continuous Packet Connectivity DTX-DRX Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the *UL DPCH Information* IE in the RADIO LINK SETUP REQUEST message contains *Diversity Mode* IE set to "Closed loop mode 1" and *UL DPCCH Slot Format* not set to "2" or "3", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the MIMO Activation Indicator IE, Sixtyfour QAM Usage Allowed Indicator IE set to "Allowed" and/or the Additional HS Cell Information RL Setup IE, but does not contain the HS-DSCH MAC-d PDU Size Format IE set to "Flexible MAC-d PDU Size", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains a MIMO Activation Indicator IE and an Additional HS Cell Information RL Setup IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *Continuous Packet Connectivity DTX-DRX Information* IE but does not contain the *F-DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *Serving E-DCH RL ID* IE but contains the *Transport Bearer Not Requested Indicator* IE, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH for a specific RL and the specific RL is combined with RL which the transport bearer is configured to be established for the DCH, previously listed in the RADIO LINK SETUP RESPONSE message in the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *Additional HS Cell Information RL Setup* IE and if the *HS-DSCH Information* IE is not present, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- If the RADIO LINK SETUP REQUEST message includes the *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE set to 'Flexible RLC PDU Size', and the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE has the value "Indexed MAC-d PDU Size", the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.
- If the RADIO LINK SETUP REQUEST message does not include the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, and the *DL RLC PDU Size Format* IE in the *HS-DSCH Information* IE has the value "Flexible RLC PDU Size", the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.
- [FDD If the RADIO LINK SETUP REQUEST message contains in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Setup* IE the *Diversity Mode* IE not set to "None" but not the

*Transmit Diversity Indicator* or contains the *Transmit Diversity Indicator* but not the *Diversity Mode* IE not set to "None", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

# 8.2.18 Physical Shared Channel Reconfiguration

#### 8.2.18.1 General

This procedure is used to assign HS-DSCH related resources to the Node B.

[TDD - This procedure is also used for handling PDSCH Sets and PUSCH Sets in the Node B, i.e.

- Adding new PDSCH Sets and/or PUSCH Sets,
- Modifying these, and
- Deleting them.]

This procedure is also used to assign E-DCH related resources to the Node B.

# 8.2.18.2 Successful Operation

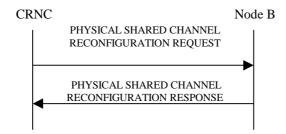


Figure 26: Physical Shared Channel Reconfiguration, Successful Operation

The procedure is initiated with a PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall activate the new configuration at the head boundary of the SFN according to the parameters given in the message.

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes an *SFN* IE, the Node B shall activate the new configuration at the head boundary of that specified SFN. If no *SFN* IE is included Node B shall activate the new configuration immediately.

## **E-DCH and HS-DSCH Resources:**

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH*, *HS-SCCH*, *E-AGCH*, *E-RGCH* and *E-HICH Total Power* IE, the Node B shall not exceed this maximum transmission power on all HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH and E-HICH codes in the cell. If a value has never been set or if the value of the *HS-PDSCH*, *HS-SCCH*, *E-AGCH*, *E-RGCH* and *E-HICH Total Power* IE is equal to or greater than the maximum transmission power of the cell the Node B may use all unused power for HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH and E-HICH codes.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH*, *HS-SCCH*, *E-AGCH*, *E-RGCH And E-HICH Total Power* IE in the *HSDPA And E-DCH Cell Portion Information* IE, the Node B shall not exceed this maximum transmission power on all HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH and E-HICH codes in the cell portion indicated by *Cell Portion ID* IE. If a value has never been set or if the value of the *HS-PDSCH*, *HS-SCCH*, *E-AGCH*, *E-RGCH And E-HICH Total Power* IE for the cell portion is equal to or greater than the maximum transmission power of the cell portion, the Node B may use all unused power for HS-PDSCH, HS-SCCH and E-AGCH, E-RGCH and E-HICH codes.]

#### **HS-DSCH Resources:**

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH And HS-SCCH Scrambling Code* IE, the Node B shall use this as the scrambling code for all HS-PDSCHs and HS-SCCHs. If a value has never been set, the Node B shall use the primary scrambling code for all HS-PDSCH and HS-SCCH codes.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH FDD Code Information* IE, the Node B shall:

- if the Number Of HS-PDSCH Codes IE is set to "0", delete any existing HS-PDSCH resources from the cell.
- if the *Number Of HS-PDSCH Codes* IE is set to any value other than "0" and HS-PDSCH resources are not currently configured in the cell, use this list as the range of codes for HS-PDSCH channels.
- if the *Number Of HS-PDSCH Codes* IE is set to any value other than "0" and HS-PDSCH resources are currently configured in the cell, replace the current range of codes with this new range of codes for HS-PDSCH channels.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-SCCH FDD Code Information* IE, the Node B shall:

- If the *HS-SCCH FDD Code Information* IE contains no codes, delete any existing HS-SCCH resources from the cell.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are not currently configured in the cell, use this list of codes as the list of codes for HS-SCCH channels.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are currently configured in the cell, replace the current list of codes with this new list of codes for HS-SCCH channels.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH* and *HS-SCCH Total Power* IE for a particular timeslot, the Node B shall not exceed this maximum transmission power on all HS-PDSCH and HS-SCCH codes in that timeslot. If a value has never been set for that timeslot or if the value of the *HS-PDSCH and HS-SCCH Total Power* IE for that timeslot is equal to or greater than the maximum transmission power of the cell the Node B may use all unused power in that timeslot for HS-PDSCH and HS-SCCH codes.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH TDD Information* IE, the Node B shall:

- If the *HS-PDSCH TDD Information* IE contains no [3.84 Mcps TDD *DL Timeslot and Code Information* IE] [1.28 Mcps TDD *DL Timeslot and Code Information LCR per UARFCN* IE] [7.68 Mcps TDD *DL Timeslot and Code Information 7.68Mcps* IE], delete any existing HS-PDSCH resources from the cell.
- If the *HS-PDSCH TDD Information* IE contains [3.84 Mcps TDD *DL Timeslot and Code Information* IE] [1.28 Mcps TDD *DL Timeslot and Code Information LCR* IE] [7.68 Mcps TDD *DL Timeslot and Code Information 7.68Mcps* IE] and HS-PDSCH resources are not currently configured in the cell, use this IE as the list of timeslots / codes for HS-PDSCH channels.
- If the *HS-PDSCH TDD Information* IE contains [3.84 Mcps TDD *DL Timeslot and Code Information* IE] [1.28 Mcps TDD *DL Timeslot and Code Information LCR* IE] [7.68 Mcps TDD *DL Timeslot and Code Information 7.68Mcps* IE] and HS-PDSCH resources are currently configured in the cell, replace the current list of timeslots / codes with this new list of timeslots / codes for HS-PDSCH channels.]
- [1.28Mcps TDD If the *HS-PDSCH TDD Information* IE contains any *DL Timeslot and Code Information LCR per UARFCN* IE and HS-PDSCH resources are not currently configured on the indicated frequency within the cell, use this IE as the list of frequency / timeslots / codes for HS-PDSCH channels on the frequency, the HSDPA resources on other frequency shall remain unchanged.]
- [1.28Mcps TDD If the *HS-PDSCH TDD Information* IE contains any *DL Timeslot and Code Information LCR per UARFCN* IE and HS-PDSCH resources are currently configured on the indicated frequency within the cell, the current list of frequency / timeslots / codes shall be replaced with this new list of frequency / timeslots / codes for HS-PDSCH channels on this frequency, the HSDPA resources on other frequency/frequencies shall remain unchanged.]
- [1.28Mcps TDD If the *DL Timeslot and Code Information LCR per UARFCN* IE contains no *DL Timeslot and Code Information LCR* IE but contains *UARFCN* IE, the existing HS-PDSCH resources on the frequency

indicated by the *UARFCN* IE shall be deleted, the HSDPA resources on other frequency/frequencies shall remain unchanged.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *Add to HS-SCCH Resource Pool* IE, the Node B shall add this resource to the HS-SCCH resource pool to be used to assign HS-SCCH sets.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify HS-SCCH Resource Pool* IEs and includes any of [3.84Mcps TDD - *TDD Channelisation Code* IE, *Midamble Shift and Burst Type* IE, *Time Slot* IE], [1.28Mcps TDD - *First TDD Channelisation Code* IE, *Second TDD Channelisation Code* IE, *Midamble Shift LCR* IE, *Time Slot LCR* IE, *TDD Channelisation Code* IE], [7.68Mcps TDD - *TDD Channelisation Code* 7.68Mcps IE, *Midamble Shift and Burst Type* 7.68Mcps IE, *Time Slot* IE], for either HS-SCCH or HS-SICH channels, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify HS-SCCH Resource Pool* IEs and includes any *UARFCN* IEs related to HS-SCCH or HS-SICH channels, the Node B shall apply these configurations on the new frequency, otherwise the old frequency is still applicable.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify HS-SCCH Resource Pool* IEs and includes the *HS-SCCH Maximum Power* IE, the Node B shall apply this value for the specified HS-SCCH code otherwise the old value is still applicable.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify HS-SCCH Resource Pool* IEs and includes the *HS-SICH Reference Signal Information* IE in the *HS-SICH Reference Signal Information Modify* IE, the Node B shall apply this HS-SICH reference signal configuration. Else if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify HS-SCCH Resource Pool* IEs and includes the *HS-SICH Reference Signal Modify* IE but does not contain the *HS-SICH Reference Signal Modify* IE, the Node B shall delete this HS-SICH reference signal configuration for the specified HS-SCCH. Otherwise the old configration is still applicable.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Delete from HS-SCCH Resource Pool* IEs, the Node B shall delete these resources from the HS-SCCH resource pool.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *Add to Non-HS-SCCH associated HS-SICH Resource Pool* IEs and includes *UARFCN* IEs related to HS-SICH channel, the Node B shall add this resource to the non-HS-SCCH associated HS-SICH resource pool on the indicated frequency, otherwise the Node B shall add this resource to the non-HS-SCCH associated HS-SICH resource pool on the primary frequency.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *Modify Non-HS-SCCH associated HS-SICH Resource Pool* IEs and includes *UARFCN* IEs related to HS-SICH channel, the Node B shall apply these configurations on the new frequency, otherwise the old frequency is still applicable.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Delete from Non-HS-SCCH associated HS-SICH Resource Pool* IEs, the Node B shall delete these resources from the non-HS-SCCH associated HS-SICH resource pool.

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HSDPA And E-DCH Cell Portion Information* IE, the Node B shall use this as the scrambling code for all HS-PDSCHs and HS-SCCHs for the cell portion indicated by Cell Portion ID. If a value has never been set, the Node B shall use the primary scrambling code for all HS-PDSCH and HS-SCCH codes for the cell portion indicated by Cell Portion ID.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH FDD Code Information* IE in the *HSDPA And E-DCH Cell Portion Information* IE, the Node B shall:

- if the *Number Of HS-PDSCH Codes* IE is set to "0", delete any existing HS-PDSCH resources from the cell portion indicated by *Cell Portion* ID IE.
- if the Number Of HS-PDSCH Codes IE is set to any value other than "0" and HS-PDSCH resources are not
  currently configured in the cell portion indicated by Cell Portion ID IE, use this list as the range of codes for HSPDSCH channels.

- if the *Number Of HS-PDSCH Codes* IE is set to any value other than "0" and HS-PDSCH resources are currently configured in the cell portion indicated by *Cell Portion ID* IE, replace the current range of codes with this new range of codes for HS-PDSCH channels.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-SCCH FDD Code Information* IE in the *HSDPA And E-DCH Cell Portion Information* IE, the Node B shall:

- If the *HS-SCCH FDD Code Information* IE contains no codes, delete any existing HS-SCCH resources from the cell portion indicated by *Cell Portion ID* IE.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are not currently configured in the cell portion indicated by *Cell Portion ID* IE, use this list of codes as the list of codes for HS-SCCH channels.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are currently configured in the cell portion indicated by *Cell Portion ID* IE, replace the current list of codes with this new list of codes for HS-SCCH channels.]

## [FDD - Enhanced Cell\_FACH Operation]:

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *HS-DSCH Common System Information* IE, then the Node B shall:

- If the HS-DSCH Common Information IE is included, then the Node B shall apply the parameters to the enhanced FACH in new configuration:
- If the *Discard Timer* IE is included in the *Priority Queue Information for Enhanced FACH* IE, then the Node B shall use this information to discard out-of-date MAC-ehs SDUs from the related HSDPA Priority Queue.
- If the FACH Measurement Occasion Cycle Length Coefficient IE is included in the HS-DSCH Common Information IE, then the Node B shall use this information for MAC-hs scheduling decisions.
- The Node B shall allocate HS-SCCH codes and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH Common System Information Response* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.
- The Node B shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH Common System Information Response* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.
- If the Common MAC Flow Specific Information IE is included, then the Node B shall apply the parameters to the enhanced FACH in new configuration:
- If the common MAC flow indicated by the Common MAC Flow ID exsits in the NodeB, then the NodeB shall apply the parameters to modify this common MAC flow; otherwise, the NodeB shall apply the parameters to newly establish the common MAC flow.
- If the *Transport Layer Address* IE and *Binding ID* IE are included in the *Common MAC Flow Specific Information* IE, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned Common MAC flow or Common MAC flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.
- If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related transport bearer.
- The Node B shall include in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every Common MAC flow being established.
- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the *HS-DSCH Common System Information Response* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message for every Common MAC flow being established, if the Node B allows the CRNC to start transmission of MAC-c PDUs before the Node B has allocated capacity on user plane as described in [24].
- If the *Common MAC Flow Priority Queue Information* IE is included in the *Common MAC Flow Specific Information* IE, the Node B shall use the information for configuring HSDPA Priority Queues.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common MAC Flows To Delete* IEs, then the Node B shall use this information to delete the indicated Common MAC flows. When a Common MAC flow is deleted, all its associated Priority Queues shall also be removed. If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common MAC Flows To Delete* IE requesting the deletion of all remaining Common MAC flows, then the Node B shall delete the HS-DSCH common system configuration and release the resources for enhanced FACH.]

## [FDD - Enhanced Cell/URA\_PCH Operation]:

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *HS-DSCH Paging System Information* IE, then the Node B shall:

- If the Paging MAC flow indicated by the Paging MAC Flow ID exsits in the NodeB, then the NodeB shall apply the parameters to modify this Paging MAC flow; otherwise, the NodeB shall apply the parameters to newly establish the Paging MAC flow.
- If the *Transport Layer Address* IE and *Binding ID* IE are included in the *Paging MAC Flow Specific Information* IE, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned Paging MAC flow or Paging MAC flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.
- If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related transport bearer.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Paging MAC Flows To Delete* IEs, then the Node B shall use this information to delete the indicated Paging MAC flows. When a Paging MAC flow is deleted, all its associated Priority Queues shall also be removed. If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Paging MAC Flows To Delete* IE requesting the deletion of all remaining Paging MAC flows, then the Node B shall delete the HS-DSCH paging system configuration and release the resources for enhanced PCH.]

## [1.28Mcps TDD - Enhanced Cell\_FACH Operation]:

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *HS-DSCH Common System Information LCR* IE, then the Node B shall:

- If the HS-DSCH Common Information LCR IE is included, then the Node B shall apply the parameters to the enhanced FACH in new configuration:
  - If the *Discard Timer* IE is included in the *Priority Queue Information for Enhanced FACH LCR* IE, then the Node B shall use this information to discard out-of-date MAC-ehs SDUs from the related HSDPA Priority Queue.
  - If the FACH Measurement Occasion Cycle Length Coefficient IE is included in the HS-DSCH Common Information LCR IE, then the Node B shall use this information for MAC-hs scheduling decisions.
  - The Node B shall allocate HS-SCCH codes and include the *HS-SCCH Specific Information Response LCR* IE in the *HS-DSCH Common System Information Response LCR* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.
  - The Node B shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH Common System Information Response LCR* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.
  - For a multi-frequency cell, if the *HARQ Memory Partitioning* IE is included in the *HS-DSCH Common System Information Response LCR* IE, the Node B shall include the *UARFCN* IE in the *HS-DSCH Common System Information Response LCR* IE to indicate the frequency of the *HARQ Memory Partitioning* IE in the *HS-DSCH Common System Information Response LCR* IE.
  - For a multi-frequency cell, the Node B can include the HARQ Memory Partitioning Per UARFCN IE in the HS-DSCH Common System Information Response LCR IE to indicate the HARQ Memory Partitioning infomation on the frequency indicated by the UARFCN IE in the HARQ Memory Partitioning Per UARFCN IF.

- The Node B shall use the value of the *E-AGCH TPC Step Size* IE contained in the *Common E-PUCH Information LCR* IE in the *Common E-DCH System Information LCR* IE for HS-SCCH inner loop power control.]
- If the Common MAC Flow Specific Information LCR IE is included, then the Node B shall apply the parameters to the enhanced FACH in new configuration:
  - If the common MAC flow indicated by the *Common MAC Flow ID LCR* IE exsits in the NodeB, then the NodeB shall apply the parameters to modify this common MAC flow; otherwise, the NodeB shall apply the parameters to newly establish the common MAC flow.
  - If the *Transport Layer Address* IE and *Binding ID* IE are included in the *Common MAC Flow Specific Information LCR* IE, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned Common MAC flow or Common MAC flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.
  - If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related transport bearer.
  - The Node B shall include in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every Common MAC flow being established.
  - The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the *HS-DSCH Common System Information Response LCR* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message for every Common MAC flow being established, if the Node B allows the CRNC to start transmission of MAC-c PDUs before the Node B has allocated capacity on user plane as described in [24].
  - If the *Common MAC Flow Priority Queue Information LCR* IE is included in the *Common MAC Flow Specific Information LCR* IE, the Node B shall use the information for configuring HSDPA Priority Queues.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common MAC Flows To Delete LCR* IEs, then the Node B shall use this information to delete the indicated Common MAC flows. When a Common MAC flow is deleted, all its associated Priority Queues shall also be removed. If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common MAC Flows To Delete LCR* IE requesting the deletion of all remaining Common MAC flows, then the Node B shall delete the HS-DSCH common system configuration and release the resources for enhanced FACH.]

[1.28Mcps TDD - If the *Power Control GAP for CELL\_FACH* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, the Node B may use the value for the power control for HS-SCCH, HS-SICH and E-AGCH according to the [21].]

[1.28Mcps TDD - If the *UL Synchronisation Parameters LCR* IE is included in the *Common E-DCH System Information LCR* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, the Node B shall use the indicated values of *Uplink Synchronisation Step Size* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]

[1.28Mcps TDD - If the *Physical Channel ID for Common E-RNTI Requested Indicator* IE in the *Common E-DCH System Information LCR* IE, if supported, the Node B shall included the *Associated Phsical Channel ID* IE in the *Common E-RNTI Information LCR* IE in the *Common E-DCH System Information Response LCR* IE to indicate the E-RUCCH associated with the related common E-RNTI group.]

## [1.28Mcps TDD - Enhanced Cell/URA\_PCH Operation]:

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *HS-DSCH Paging System Information LCR* IE, then the Node B shall:

- If the Paging MAC flow indicated by the *Paging MAC Flow ID* IE exsits in the NodeB, then the NodeB shall apply the parameters to modify this Paging MAC flow; otherwise, the NodeB shall apply the parameters to newly establish the Paging MAC flow.

- If the *Transport Layer Address* IE and *Binding ID* IE are included in the *Paging MAC Flow Specific Information LCR* IE, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned Paging MAC flow or Paging MAC flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.
- If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related transport bearer.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Paging MAC Flows To Delete LCR* IEs, then the Node B shall use this information to delete the indicated Paging MAC flows. When a Paging MAC flow is deleted, all its associated Priority Queues shall also be removed. If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Paging MAC Flows To Delete LCR* IE requesting the deletion of all remaining Paging MAC flows, then the Node B shall delete the HS-DSCH paging system configuration and release the resources for enhanced PCH.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common E-DCH System Information LCR* IE, and the *Scheduling Priority Indicator* IE is present in the *Common E-DCH Logical Channel information* IE in the *Common E-DCH MAC-d Flow Specific Information LCR* IE, the Node B may use this IE to do the related scheduling operation.

#### [FDD - E-DCH Resources]:

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE, the Node B shall use this as the scrambling code for all E-AGCHs, E-RGCHs and E-HICHs. If a value has never been set, the Node B shall use the primary scrambling code for all E-AGCH, E-RGCH and E-HICH codes.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-AGCH FDD Code Information* IE, the Node B shall:]

- [FDD If the *E-AGCH FDD Code Information* IE contains no codes, delete any existing E-AGCH resources from the cell.]
- [FDD If the *E-AGCH FDD Code Information* IE contains one or more codes and E-AGCH resources are not currently configured in the cell, use this list of codes as the list of codes for E-AGCH channels.]
- [FDD If the *E-AGCH FDD Code Information* IE contains one or more codes and E-AGCH resources are currently configured in the cell, replace the current list of codes with this new list of codes for E-AGCH channels.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-RGCH/E-HICH FDD Code Information* IE, the Node B shall:]

- [FDD If the *E-RGCH/E-HICH FDD Code Information* IE contains no codes, delete any existing E-RGCH/E-HICH resources from the cell.]
- [FDD If the *E-RGCH/E-HICH FDD Code Information* IE contains one or more codes and E-RGCH/E-HICH resources are not currently configured in the cell, use this list of codes as the list of codes for E-RGCH/E-HICH channels.]
- [FDD If the *E-RGCH/E-HICH FDD Code Information* IE contains one or more codes and E-RGCH/E-HICH resources are currently configured in the cell, replace the current list of codes with this new list of codes for E-RGCH/E-HICH channels.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Maximum Target Received Total Wide Band Power* IE, the Node B shall use this value to control E-DCH scheduling.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Reference Received Total Wide Band Power* IE, the Node B may use this value to control E-DCH scheduling.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Target Non-serving E-DCH to Total E-DCH Power Ratio* IE, the Node B shall store this value and use this value for E-DCH scheduling by controlling the ratio of received E-DCH wide band power from non-serving UEs to the total received E-DCH power.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE in the *HSDPA And E-DCH Cell Portion Information* IE, the Node B shall use this as the scrambling code for all E-AGCHs, E-RGCHs and E-HICHs for the cell portion indicated by Cell Portion ID. If a value has never been set, the Node B shall use the primary scrambling code for all E-AGCH, E-RGCH and E-HICH codes for the cell portion indicated by Cell Portion ID.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-AGCH FDD Code Information* IE in the *HSDPA And E-DCH Cell Portion Information* IE, the Node B shall:]

- [FDD If the *E-AGCH FDD Code Information* IE contains no codes, delete any existing E-AGCH resources from the cell portion indicated by *Cell Portion* ID IE.]
- [FDD If the *E-AGCH FDD Code Information* IE contains one or more codes and E-AGCH resources are not currently configured in the cell portion indicated by *Cell Portion* ID IE, use this list of codes as the list of codes for E-AGCH channels.]
- [FDD If the *E-AGCH FDD Code Information* IE contains one or more codes and E-AGCH resources are currently configured in the cell portion indicated by *Cell Portion* ID IE, replace the current list of codes with this new list of codes for E-AGCH channels.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-RGCH/E-HICH FDD Code Information* IE in the *HSDPA And E-DCH Cell Portion Information* IE, the Node B shall:]

- [FDD If the *E-RGCH/E-HICH FDD Code Information* IE contains no codes, delete any existing E-RGCH/E-HICH resources from the cell portion indicated by *Cell Portion ID* IE.]
- [FDD If the *E-RGCH/E-HICH FDD Code Information* IE contains one or more codes and E-RGCH/E-HICH resources are not currently configured in the cell portion indicated by *Cell Portion ID* IE, use this list of codes as the list of codes for E-RGCH/E-HICH channels.]
- [FDD If the *E-RGCH/E-HICH FDD Code Information* IE contains one or more codes and E-RGCH/E-HICH resources are currently configured in the cell portion indicated by *Cell Portion ID* IE, replace the current list of codes with this new list of codes for E-RGCH/E-HICH channels.]

### [TDD - E-DCH Resources]:

[3.84Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-PUCH Information* IE, the Node B shall:

- If the *E-PUCH Information* IE contains no *E-PUCH Timeslot Information* IE, then the Node B shall delete any existing E-DCH resources from the cell.
- If the *E-PUCH Information* IE contains *E-PUCH Timeslot Information* IE and E-DCH resources are not currently configured in the cell, use this IE as the list of timeslots for E-PUCH channels.
- If the *E-PUCH Information* IE contains *E-PUCH Timeslot Information* IE and E-DCH resources are currently configured in the cell, replace the current list of timeslots with this new list of timeslots for E-PUCH channels.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-PUCH Information 1.28Mcps* IE, the Node B shall:

- If the *E-PUCH Information 1.28Mcps* IE contains no *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE, then the Node B shall delete any existing E-DCH resources from the cell.
- For a single-frequency cell, if the *E-PUCH Information 1.28Mcps* IE contains *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE and E-DCH resources are not currently configured in the cell, use this IE as the list of timeslots / codes for E-PUCH channels.
- For a single-frequency cell, if the *E-PUCH Information 1.28Mcps* IE contains *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE and E-DCH resources are currently configured in the cell, replace the current list of timeslots / codes with this new list of timeslots / codes for E-PUCH channels.
- For a multi-frequency cell, if the *E-PUCH Information 1.28Mcps* IE contains *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE and E-DCH resources are not currently configured on the indicated frequency in the cell, use this IE as the list of frequency / timeslots / codes for E-PUCH channels, the E-DCH resources on other frequency shall remain unchanged.

- For a multi-frequency cell, if the *E-PUCH Information 1.28Mcps* IE contains *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE and E-DCH resources are currently configured on the indicated frequency in the cell, replace the current list of frequency / timeslots / codes with this new list of timeslots / codes for E-PUCH channels, the E-DCH resources on other frequency shall remain unchanged.
- For a multi-frequency cell, if the *E-PUCH Information 1.28Mcps* IE contains *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE but only *UARFCN* IE is included, then the Node B shall delete the existing E-DCH resources on the frequency indicated by the *UARFCN* IE from the cell, the E-DCH resources on other frequency shall remain unchanged.]

[7.68Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-PUCH Information 7.68Mcps* IE, the Node B shall:

- If the *E-PUCH Information 7.68Mcps* IE contains no *E-PUCH Timeslot Information* IE, then the Node B shall delete any existing E-DCH resources from the cell.
- If the *E-PUCH Information 7.68Mcps* IE contains *E-PUCH Timeslot Information* IE and E-DCH resources are not currently configured in the cell, use this IE as the list of timeslots for E-PUCH channels.
- If the *E-PUCH Information 7.68Mcps* IE contains *E-PUCH Timeslot Information* IE and E-DCH resources are currently configured in the cell, replace the current list of timeslots with this new list of timeslots for E-PUCH channels.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes [3.84Mcps TDD - *Add to E-AGCH Resource Pool 1.28Mcps* IE][7.68Mcps TDD - *Add to E-AGCH Resource Pool 7.68Mcps* IE], the Node B shall add this resource to the E-AGCH resource pool to be used to assign E-AGCH sets.]

[3.84Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify E-AGCH Resource Pool* IEs and includes any of *TDD Channelisation Code* IE, *Midamble Shift and Burst Type* IE, *Time Slot* IE, for E-AGCH channels, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify E-AGCH Resource Pool 1.28Mcps* IEs and includes any of *First TDD Channelisation Code* IE, *Second TDD Channelisation Code* IE, *Midamble Shift LCR* IE, *Time Slot LCR* IE, *UARFCN* IE for E-AGCH channels, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[7.68Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify E-AGCH Resource Pool 7.68Mcps* IEs and includes any of *TDD Channelisation Code 7.68Mcps* IE, *Midamble Shift and Burst Type 7.68Mcps* IE, *Time Slot* IE, for E-AGCH channels, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any [3.84Mcps TDD - *Modify E-AGCH Resource Pool IEs*] [1.28Mcps - *Modify E-AGCH Resource Pool 1.28Mcps* IEs][7.68Mcps TDD - *Modify E-AGCH Resource Pool 7.68Mcps* IEs]and includes the *Maximum E-AGCH Power* IE, the Node B shall apply this value for the specified E-AGCH code otherwise the old value is still applicable.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Delete from E-AGCH Resource Pool* IEs, the Node B shall delete these resources from the E-AGCH resource pool.]

[3.84Mcps TDD and 7.68Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the [3.84Mcps TDD - *E-HICH Information IE*] [7.68Mcps TDD - *E-HICH Information 7.68Mcps IE*], the Node B shall configure the E-HICH according to the parameters.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Add to E-HICH Resource Pool 1.28Mcps* IE, the Node B shall add this resource to the E-HICH resource pool to be used to assign Scheduled or Non-scheduled E-HICH sets.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify E-HICH Resource Pool 1.28Mcps* IEs and includes any of *E-HICH Type* IE, *TDD Channelisation Code* IE, *Midamble Shift LCR* IE, *Time Slot LCR* IE, *UARFCN* IE for E-HICH channels, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify E-HICH Resource Pool 1.28Mcps* IEs and includes the *Maximum E-HICH Power* IE, the Node B shall apply this value for the specified E-HICH code otherwise the old value is still applicable.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Delete from E-HICH Resource Pool 1.28Mcps* IEs, the Node B shall delete these resources from the E-HICH resource pool.]

[3.84Mcps TDD and 7.68Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Maximum Generated Received Total Wide Band Power in Other Cells* IE, the Node B shall use this value to control E-DCH scheduling.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *Maximum Target Received Total Wide Band Power LCR* IE, the Node B shall use this value to control E-DCH scheduling.]

## [TDD - PDSCH/PUSCH Addition]:

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be added, the Node B shall add these new sets to its PDSCH/PUSCH configuration.]

[1.28Mcps TDD - If the *TSTD Indicator* IE is included in *PDSCH To Add Information LCR* IE and is set to "active", the Node B shall activate TSTD diversity for PDSCH transmissions using the specified PDSCH Set that are not beacon channels [19,21]. If the *TSTD Indicator* IE is set to "not active" or the TSTD Indicator IE is not included in *PDSCH To Add Information LCR* IE, the Node B shall not activate TSTD diversity for the PDSCH Set.]

#### [TDD - PDSCH/PUSCH Modification]:

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be modified, and includes any of [3.84Mcps TDD - *DL/UL Code Information IE, Midamble Shift And Burst Type IE, Time Slot IE*], [1.28Mcps TDD - *DL/UL Code Information LCR IE, Midamble Shift LCR IE, Time Slot LCR IE*], [7.68Mcps TDD - *DL/UL Code Information 7.68Mcps IE, Midamble Shift And Burst Type 7.68Mcps IE, Time Slot IE*], *TDD Physical Channel Offset IE, Repetition Period IE, Repetition Length IE*, or *TFCI Presence IE*, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

#### [TDD - PDSCH/PUSCH Deletion]:

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be deleted the Node B shall delete these sets from its PDSCH/PUSCH configuration.]

## [1.28Mcps TDD - SYNC\_UL Partition]:

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *SYNC\_UL Partition Information* IE, the Node B shall store the *E-RUCCH SYNC\_UL codes bitmap* IE used to differentiate the E-DCH random access from the RACH random access according to [21].]

### [FDD – Common E-DCH Operation]:

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common E-DCH System Information* IE, then the Node B shall:

- If the *Common E-DCH UL DPCH Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:
- If the *Common E-DCH E-DPCH Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:
  - If the *E-RGCH 2-Index-Step* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, the Node B shall use the value when the new configuration is being used. For the case of initial assignment of E-DCH related resources to the NodeB, if *E-RGCH 2-Index-Step* IE is not present, the NodeB shall use the default value defined in [18].
  - If the *E-RGCH 3-Index-Step* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, the Node B shall use the value when the new configuration is being used. For the case

of initial assignment of E-DCH related resources to the NodeB, if *E-RGCH 3-Index-Step* IE is not present, the NodeB shall use the default value defined in [18].

- If the *Common E-DCH Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:
  - If the *E-DCH Reference Power Offset* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-i PDU and to determine the value of the actual HARQ power offset.
  - If the *E-DCH Power Offset for Scheduling Info* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-is PDUs.
  - If the *Maximum TB Sizes* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B may use this information for the Node B scheduler in the new configuration.
- If the *Common E-DCH HS-DPCCH Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration.
  - If the Common E-DCH CQI Information is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall use the information for CQI operation in the new configuration.
- If the *Common E-DCH Preamble Control Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:
  - If the *E-AI Indicator* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall use this value for configuration of E-AIs on the AICH.
  - If the *Common E-DCH AICH Information* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall use this information for configuration of AICH.
- If the *Common E-DCH F-DPCH Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration.
  - If the *Initial DL Transmission Power* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall, if supported, use this value for configuration of Initial DL Transmission Power on the F-DPCH.
  - If the *Maximum DL Power* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall, if supported, use this value for configuration of Maximum DL Power on the F-DPCH.
  - If the *Minimum DL Power* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall, if supported, use this value for configuration of Minimum DL Power on the F-DPCH.
- If the *Common E-DCH E-AGCH Channelisation Code Number* IE is included, then the Node B shall use the indicated channelization code for the E-AGCH for the common E-DCH in the new configuration.
- If the *Common E-DCH Resource Combination Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:
  - If the *E-RGCH Signature Sequence* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall configure the E-RGCH for the combination and use indicated signature sequence.
- If the UL Common MAC Flow Specific Information IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:
  - If the *Transport Layer Address* IE and *Binding ID* IE are included in the UL *Common MAC Flow Specific Information* IE, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned UL Common MAC flow.

- If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related transport bearer.
- The Node B shall include in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every UL Common MAC flow being established.
- If the *Bundling Mode Indicator* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the Common E-DCH UL data frames for the related UL Common MAC flow, otherwise the Node B shall use the non-bundling mode for the Common E-DCH UL data frames for the related UL Common MAC flow.
- If the *E-DCH MAC-d Flow Multiplexing List* IE is included for a Common E-DCH MAC-d flow in the *Common E-DCH MAC-d Flow Specific Information* IE, the Node B shall use this information for the related resource allocation operation.
- If the *E-RNTI List Request* IE is included, then the Node B shall, if supported, include the *E-RNTI List* IE in the *Common E-DCH System Information Response* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common UL MAC Flows To Delete* IEs, then the Node B shall use this information to delete the indicated Common UL MAC flows. If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common UL MAC Flows To Delete* IE requesting the deletion of all remaining Common UL MAC flows, then the Node B shall delete the common E-DCH system configuration and release the resources for Common E-DCH.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common E-DCH MAC-d Flows To Delete* IEs, then the Node B shall use this information to delete the indicated Common E-DCH MAC-d flows. If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining Comm E-DCH MAC-d flows associated to a Common UL MAC flow, then the Node B shall release the resources for the Common UL MAC flow.]

## [1.28Mcps TDD – Common E-DCH Operation]:

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common E-DCH System Information LCR* IE, then the Node B shall:

- If the *UL Common MAC Flow Specific Information LCR* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:
  - If the *Transport Layer Address* IE and *Binding ID* IE are included in the UL Common MAC Flow Specific Information IE, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned UL Common MAC flow.
  - If the *TNL QoS* IE is included and if ALCAP is not used, the TNL QoS IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related transport bearer.
  - The Node B shall include in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE
    message the Binding ID IE and Transport Layer Address IE for establishment of transport bearer for every
    UL Common MAC flow being established.
  - If the *E-DCH MAC-d Flow Multiplexing List* IE is included for a Common E-DCH MAC-d flow in the *Common E-DCH MAC-d Flow Specific Information LCR* IE, the Node B shall use this information for the related resource allocation operation.]
- If the *Common E-PUCH Information LCR* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration.
- If the *E-TFCS Information TDD* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration.

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common E-DCH MAC-d Flows To Delete LCR* IEs, then the Node B shall use this information to delete the indicated Common E-DCH MAC-d flows. If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common UL MAC Flows to Delete LCR* IE requesting the deletion of all remaining Comm E-DCH MAC-d flows associated to a Common UL MAC flow, then the Node B shall release the resources for the Common UL MAC flow.]

#### [FDD – Enhanced UE DRX Operation]:

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Enhanced UE DRX Information* IE, then the Node B shall use the information to execute Enhanced UE DRX for the cell.]

## [1.28Mcps DD – Enhanced UE DRX Operation]:

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Enhanced UE DRX Information LCR* IE, then the Node B shall use the information to execute Enhanced UE DRX for the cell.]

## [1.28Mcps TDD - Shared physical channels Synchronisation Detection]:

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the *Out-of-sync Detection Window* IE, then the Node B shall use this IE to detect the synchronization status of UE as described in ref [21], subclause 5.3.2A.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Treset Usage Indicator* IE, if supported, the Node B shall stop using all configured MAC-ehs Reset Timers for the UEs in enhanced CELL PCH or CELL FACH with dedicated H-RNTI according to [32].]

#### **Response Message:**

#### **HS-DSCH/HS-SCCH Resources:**

In the successful case involving HS-PDSCH or HS-SCCH resources, the Node B shall store the value of *Configuration Generation ID* IE and it shall make these resources available to all the current and future HS-DSCH transport channels; and shall respond with PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.

## [TDD - PDSCH/PUSCH Addition/Modification/Deletion]:

[TDD - In the successful case involving PDSCH/PUSCH addition, modification or deletion, the Node B shall add, modify and delete the PDSCH Sets and PUSCH Sets in the Common Transport Channel data base, as requested in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, and shall make these available to all the current and future DSCH and USCH transport channels. The Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.]

## 8.2.18.3 Unsuccessful Operation

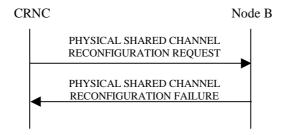


Figure 27: Physical Shared Channel Reconfiguration procedure: Unsuccessful Opreration

If the Node B is not able to support all parts of the configuration, it shall reject the configuration of all the channels in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message. The *Cause* IE shall be set to an appropriate value [TDD - either a single general cause value or PDSCH and PUSCH set specific cause values for each set that caused a failure within the *Unsuccessful DL Shared Channel Set* IE for PDSCH sets or *Unsuccessful UL Shared Channel Set* IE for PUSCH sets]. The *Configuration Generation ID* shall not be changed in the Node B.

If the configuration was unsuccessful, the Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message:

[1.28Mcps TDD - For a multi-frequency cell, if the Node B is not able to support all parts of the configuration, in the case the Node B can only support configuration on one or some frequencies, the HSDPA or E-DCH related resources on this or these frequencies may be regarded as having successfully been established/reconfigured/removed, the Node B shall reject the HSDPA or E-DCH related configuration on other failed frequencies. The Node B may respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message. The *HS-Cause* IE or *E-Cause* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message may be set to specific cause values for each frequency that caused a HSDPA or E-DCH related configuration failure. If the failure occurs on the HS-PDSCH, HS-SCCH, E-PUCH or E-AGCH resources, the Node B may store the value of the *Configuration Generation ID* IE and it shall make these resources available to all the current and future HS-DSCH or E-DCH transport channels. If the Node B is not able to support the HSDPA or E-DCH related configuration on any frequencies, the *Cause* IE may be set to an appropriate value, which is either a general cause value or specific cause values for each frequency that caused a failure. For the successfully configured HSUPA frequencies, the *E-HICH Time Offset LCR per UARFCN* IE may be included in the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message. For the successfully configured Enhanced CELL\_FACH frequencies, the *Common System Information Response LCR* IE may be included in the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.]

Typical cause values are as follows:

## **Radio Network Layer Cause:**

- Cell not available
- Node B Resources unavailable

#### **Transport Layer Cause:**

- Transport Resources Unavailable

### **Miscellaneous Cause:**

- O&M Intervention
- Control processing overload
- HW failure

## 8.2.18.4 Abnormal Conditions

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains *Add to HS-SCCH Resource Pool* IE, the *Modify HS-SCCH Resource Pool* IE, or the *Delete from HS-SCCH Resource Pool* IE and does not contain the *Configuration Generation ID* the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[3.84Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the *Add to E-AGCH Resource Pool* IE, the *Modify E-AGCH Resource Pool* IE, or the *Delete from E-AGCH Resource Pool* IE and does not contain the *Configuration Generation ID* the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the Add to E-AGCH Resource Pool 1.28Mcps IE, the Modify E-AGCH Resource Pool 1.28Mcps IE, or the Delete from E-AGCH Resource Pool IE and does not contain the Configuration Generation ID the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the Add to E-HICH Resource Pool 1.28Mcps IE, the Modify E-HICH Resource Pool 1.28Mcps IE, or the Delete from E-HICH Resource Pool 1.28Mcps IE and does not contain the Configuration Generation ID the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[7.68Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the Add to E-AGCH Resource Pool 7.68Mcps IE, the Modify E-AGCH Resource Pool 7.68Mcps IE, or the Delete from E-AGCH Resource Pool IE and does not contain the Configuration Generation ID the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the Configuration Generation ID IE and does not contain at least one of Add to HS-SCCH Resource Pool IE, the Modify HS-SCCH Resource Pool IE, [3.84Mcps TDD - the Add to E-AGCH Resource Pool IE, the Modify E-AGCH Resource Pool IE,] [1.28Mcps TDD - the Add to E-AGCH Resource Pool 1.28Mcps IE, the Modify E-AGCH Resource Pool 1.28Mcps IE, the Delete from E-AGCH Resource Pool IE, the Add to E-HICH Resource Pool 1.28Mcps IE, the Modify E-HICH Resource Pool 1.28Mcps IE, the Delete from E-HICH Resource Pool 1.28Mcps IE,][7.68Mcps TDD - the Add to E-AGCH Resource Pool 7.68Mcps IE, the Modify E-AGCH Resource Pool 7.68Mcps IE, the Delete from E-AGCH Resource Pool IE,] or the Delete from HS-SCCH Resource Pool IE the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[FDD - If neither E-AGCH nor E-HICH/E-RGCH resources are configured in the cell, and if one or more codes are included in the *E-AGCH FDD Code Information* IE and/or *E-RGCH/E-HICH FDD Code Information* IE but the *Maximum Target Received Total Wide Band Power* IE is not included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall send PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE, and the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE is not identical to the scrambling code of the phase reference, then the Node B shall reject the procedure using the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE in the *HSDPA And E-DCH Cell Portion Information* IE, and the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE is not identical to the scrambling code of the phase reference, then the Node B shall reject the procedure using the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-DSCH Common Information* IE and/or *Common MAC Flow Specific Information* IE and if the Priority Queues associated with the same *Common MAC Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *UARFCN* IE in the *DL Timeslot and Code Information LCR per UARFCN* IE in the *HS-PDSCH TDD Information* IE, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *UARFCN* IE in the *HS-SCCH Information LCR* IE in the *Add to HS-SCCH Resource Pool* IE, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the *UARFCN* IE in the *HS-SCCH Information LCR* IE in the *Modify HS-SCCH Resource Pool* IE, the HS-SCCH information on the new frequency shall be provided, otherwise the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the *UARFCN* IE in the *E-AGCH Information 1.28Mcps* IE in the *Modify E-AGCH Resource Pool 1.28Mcps* IE, the E-AGCH information on the new frequency shall be provided, otherwise the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the *UARFCN* IE in the *E-HICH Information 1.28Mcps* IE in the *Modify E-HICH Resource Pool 1.28Mcps* IE, the E-HICH information on the new frequency shall be provided, otherwise the Node B

shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *DL Timeslot and Code Information LCR* IE in the *DL Timeslot and Code Information LCR* IE in the *DL Timeslot and Code Information LCR per UARFCN* IE in the *HS-PDSCH TDD Information* IE but contains *UARFCN* IE, and no HS-DSCH resources are configured on the frequency within the cell, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *UARFCN* IE in the *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE in the *E-PUCH Information 1.28Mcps* IE, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *UARFCN* IE in the *Add to E-AGCH Resource Pool 1.28Mcps* IE, the *Modify E-AGCH Resource Pool 1.28Mcps* IE, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *UARFCN* IE in the *Add to E-HICH Resource Pool 1.28Mcps* IE, the *Modify E-HICH Resource Pool 1.28Mcps* IE, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *E-PUCH Timeslot Information 1.28Mcps* IE in the *E-PUCH Timeslot Information 1.28Mcps* IE but contains *UARFCN* IE, and no E-DCH resources are configured on the frequency within the cell, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common E-DCH System Information* IE and if the message does not contain the *HS-DSCH Common System Information* IE or the resource for enhanced FACH is not configured for the cell, the Node B shall reject the procedure using the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Enhanced UE DRX Information* IE and if the message does not contain the *HS-DSCH Common System Information* IE or the resource for enhanced FACH is not configured for the cell, the Node B shall reject the procedure using the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.]

If ALCAP is not used, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE for the newly established Common MAC Flow, Paging MAC Flow and/or UL Common MAC Flow, the Node B shall reject the procedure using the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.

## 8.2.19 Reset

8.2.19.1 General

The purpose of the Reset procedure is to align the resources in the CRNC and the Node B in the event of an abnormal failure. The CRNC or the Node B may initiate the procedure.

8.2.19.2 Successful Operation

## 8.2.19.2.1 Reset Initiated by the CRNC

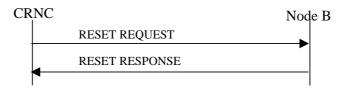


Figure 27A Reset procedure (CRNC to Node B), Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

If the *Reset Indicator* IE is set to "Communication Context", the Node B shall remove all the indicated Node B Communication Contexts (identified by a *Node B Communication Context ID* or a *CRNC Communication Context ID* IE) and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

If the *Reset Indicator* IE is set to "Communication Control Port", the Node B shall remove all the Node B Communication Contexts controlled via the indicated Communication Control Port(s) and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

If the *Reset Indicator* IE is set to "Node B", the Node B shall remove all the Node B Communication Contexts within the Node B and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

## 8.2.19.2.2 Reset Initiated by the Node B

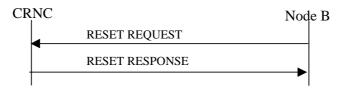


Figure 27B Reset procedure (Node B to CRNC), Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the Node B to the CRNC using the Node B Control Port.

If the *Reset Indicator* IE is set to "Communication Context", for all indicated CRNC Communication Contexts (indicated by a *CRNC Communication Context ID* or a *Node B Communication Context ID* IE), the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the indicated CRNC Communication Contexts. After clearing all related resources, the CRNC shall return the RESET RESPONSE message to the Node B.

If the *Reset Indicator* IE is set to "Communication Control Port", for all the CRNC Communication Contexts controlled via the indicated Communication Control Port(s), the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the CRNC Communication Contexts controlled via the indicated Communication Control Port(s). After clearing all related resources, the CRNC shall return the RESET RESPONSE message to Node B.

If the *Reset Indicator* IE is set to the "Node B", for all the CRNC Communication Contexts related to this Node B, the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the CRNC Communication Contexts related to this Node B. After clearing all related resources, the CRNC shall return the RESET RESPONSE message to Node B.

## 8.2.19.3 Unsuccessful Operation

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#### 8.2.19.4 Abnormal Conditions

If the RESET REQUEST message is received any ongoing procedure related to a CRNC Communication Context in the CRNC or Node B Communication Context in the Node B indicated (explicitly or implicitly) in the message shall be aborted.

# 8.2.20 Cell Synchronisation Initiation [TDD]

#### 8.2.20.1 General

This procedure is used by a CRNC to request the transmission of [3.84Mcps TDD - Cell Synchronisation Bursts sent in the PRACH time slots] [1.28Mcps TDD - SYNC\_DL code sent in the DwPTS] and/or to start measurements on [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC\_DL code] in a Node B.

## 8.2.20.2 Successful Operation

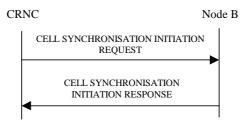


Figure 27C Cell Synchronisation Initiation procedure, Successful Operation

The procedure is initiated with a CELL SYNCHRONISATION INITIATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall initiate the requested transmission according to the parameters given in the request and start the measurement on [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC\_DL code] if requested.

# $[3.84 Mcps\ TDD\ -\ Cell\ Sync\ Burst\ Transmission\ Initiation]\ [1.28 Mcps\ TDD\ -\ SYNC\_DL\ Code\ Transmission\ Initiation\ LCR]:$

When the [3.84Mcps TDD - Cell Sync Burst Transmission Initiation Information] [1.28Mcps TDD - SYNC\_DL Code Transmission Initiation Information LCR] is present, the Node B shall configure the transmission of the cell synchronisation burst according to the parameters given in the CELL SYNCHRONISATION INITIATION REQUEST message. The *SFN* IE indicates the frame number when the cell shall start transmitting cell synchronisation bursts.

[3.84Mcps TDD - When the Cell Sync Burst Transmission Initiation Information is present and the "Frequency Acquisition" is indicated within the *Synchronisation Report Type* IE, the Node B shall first perform only frequency locking on received cell synchronisation bursts. Transmission of the indicated cell synchronisation bursts shall be started only if the frequency locking is performed successfully and "Frequency Acquisition completed" is reported to the RNC.]

# [3.84Mcps TDD - Cell Sync Burst Measurement characteristics] [1.28Mcps TDD - SYNC\_DL Code Measurement characteristics LCR]:

When the [3.84Mcps TDD - Cell Sync Burst Measurement Initiation Information][1.28Mcps TDD - SYNC\_DL Code Measurement Initiation Information LCR] is present, the Node B shall initiate measurements on the indicated cell synchronisation burst.

If the *SFN* IE is present, the Node B shall after measurement of the indicated [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] adjust the frame number of the indicated cell according to the SFN of the CELL SYNCHRONISATION INITIATION REQUEST message. This adjustment shall only apply to the late entrant cell at the late entrant phase.

#### **Synchronisation Report characteristics:**

The *Synchronisation Report Characteristics* IE indicates how the reporting of the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] measurement shall be performed. Whenever the Cell Synchronisation Initiation procedure is initiated, only [3.84Mcps TDD - the "Frequency Acquisition completed" or] "Frame related" report characteristics type shall apply.

[3.84Mcps TDD - If the *Synchronisation Report characteristics type* IE is set to "Frequency Acquisition completed", the Node B shall signal completion of frequency acquisition to the RNC when locking is completed.]

If the *Synchronisation Report characteristics type* IE is set to "Frame related", the Node B shall report the result of the cell synchronisation burst measurement after every measured frame.

[3.84Mcps TDD - If the *Cell Sync Burst Arrival Time* IE is included in the *Cell Sync Burst Information* IE of the *Synchronisation Report Characteristics* IE, it indicates to the Node B the reference time at which the reception of the cell synchronisation burst of a neighbouring cell is expected.]

[3.84Mcps TDD - If the *Cell Sync Burst Timing Threshold* IE is included in the *Cell Sync Burst Information* IE of the *Synchronisation Report Characteristics* IE, the Node B shall use this threshold as a trigger for the CELL SYNCHRONISATION REPORT message.]

[1.28Mcps TDD - If the SYNC\_DL Code ID Arrival Time IE is included in the SYNC\_DL Code Information LCR IE of the Synchronisation Report Characteristics IE, it indicates to the Node B the reference time at which the reception of the SYNC\_DL Code of a neighbouring cell is expected.]

[1.28Mcps TDD - If the *SYNC\_DL Code ID Timing Threshold* IE is included in the *SYNC\_DL Code Information LCR* IE of the *Synchronisation Report Characteristics* IE, the Node B shall use this threshold as a trigger for the CELL SYNCHRONISATION REPORT message.]

#### Response message:

If the Node B was able to initiate the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] transmission and/or measurement requested by the CRNC it shall respond with the CELL SYNCHRONISATION INITIATION RESPONSE message sent over the Node B Control Port.

## 8.2.20.3 Unsuccessful Operation

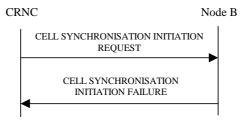


Figure 27D Cell Synchronisation Initiation procedure, Unsuccessful Operation

If the requested transmission or measurement on [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC\_DL Code] cannot be initiated, the Node B shall send a CELL SYNCHRONISATION INITIATION FAILURE message over the Node B control port. The message shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

## **Radio Network Layer Cause:**

- Cell Synchronisation not supported
- Power level not supported
- Measurement Temporarily not Available
- Frequency Acquisition not supported

#### **Miscellaneous Cause:**

- O&M Intervention

HW failure

## 8.2.20.4 Abnormal Conditions

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# 8.2.21 Cell Synchronisation Reconfiguration [TDD]

## 8.2.21.1 General

This procedure is used by a CRNC to reconfigure the transmission of [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC\_DL Code] and/or to reconfigure measurements on [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC\_DL Code] in a Node B.

## 8.2.21.2 Successful Operation

#### 8.2.21.2.1 General

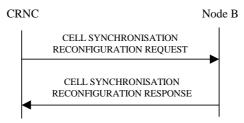


Figure 27E Cell Synchronisation Reconfiguration procedure, Successful Operation

The procedure is initiated with a CELL SYNCHRONISATION RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall reconfigure the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] transmission and/or measurements according to the parameters given in the request.

## 8.2.21.2.2 [3.84Mcps TDD - Cell Sync Burst Schedule]

Within the CELL SYNCHRONISATION RECONFIGURATION REQUEST message first the schedule for the steady state phase is fixed. I.e. the number of cycles per SFN period is defined with the same schedule. For each cycle, the number of repetitions is defined according to following equations:

Cycle length: 4096 / value of Number Of Cycles Per SFN Period IE

Repetition period: Cycle length / value of Number Of Repetitions Per Cycle Period IE

Cell Sync Frame number is calculated by:

SFN = floor((k-1) \* Cycle length + (i-1) \* Repetition period)

 $k = \{1, 2, 3, ... \text{ Number of cycle per SFN period}\}$ 

 $i = \{1, 2, 3, ... \text{ Cell Sync Frame number within cycle period}\}$ 

## 8.2.21.2.3 [1.28Mcps TDD - SYNC DL Code Schedule]

Within the CELL SYNCHRONISATION RECONFIGURATION REQUEST message first the schedule for the steady state phase is fixed. The "schedule" includes

- the list of frame numbers SFN within the SFN period where SYNC\_DL Code transmission or reception takes place, i.e. the "synchronisation frames", and

- the associated actions (SYNC\_DL Code transmission, reception, averaging, reporting etc) to be performed for synchronisation purpose by the Node B at each of these SFNs.

Within the synchronisation frames, only the first subframe shall be used for sending or receiving a SYNC\_DL Code in the DwPTS while in the second subframe, normal operation continues.

The synchronisation schedule includes the option of averaging of measured correlation results within the Node B over a sequence of measurements, for increasing the reliability of the Time of Arrival measurement obtained from the correlation results. For this purpose, the concept of "subcycles" has been introduced: Each Synchronisation Cycle is devided into "subcycles" where in each subcycle, the same set of SYNC\_DL transmissions and receptions is performed, and averaging takes place over all the subcycles within a Synchronisation Cycle. Since the list of actions (transmission, measurements etc) is the same in each subcycle, and the subcycles are repeated to make up a cycle, and the cycles make up an SFN period, the full list of actions is derived by the actions specified for a subcycle.

The full list of SFNs which make up the synchronisation schedule within the SFN period are calculated in Node B and CRNC autonomously based on the following parameters included in the CELL SYNCHRONISATION RECONFIGURATION REQUEST message: "Number of cycles per SFN period", "Number of subcycles per cycle period", and "Number of repetitions per cycles period", along the following equations:

Cycle length: 4096 / value of Number Of Cycles Per SFN Period IE

Subcycle length: Cycle length / value of Number Of Subcycles Per Cycle Period IE

Repetition period: Subcycle length / value of Number Of Repetitions Per Cycle Period IE

SFN = floor((k-1) \* Cycle length + (j-1)\*Subcycle length + (i-1)\* Repetition period)

 $k = \{1, 2, 3, ... \text{ Number of cycle per SFN period}\}$ 

 $j = \{1, 2, 3, ... \text{ Number of subcycles per cycle}\}$ 

 $i = \{1, 2, 3, ...$  Number of repetitions per cycle period $\}$ 

Note that if the *Number Of Subcycles Per Cycle* IE is equal to 1, then the subcycles are identical to the "Synchronisation Cycles".

If the *Number Of Subcycles Per Cycle* IE is included in the CELL SYNCHRONISATION RECONFIGURATION REQUEST [TDD] message, then the Node B shall apply this number for dividing the Synchronisation Cycles in Subcycles. If the IE is not present, then the Node B shall assume that there is one subcycle per synchronisation cycle only, which is identical to the synchronisation cycle.

Averaging is performed as follows:

- From each SYNC\_DL code being received according to the schedule, the Node B shall calculate a "correlation function" by matching the received data with the respective expected code.
- Therefore the set of measurements within one subcycle provides a set of "correlation functions".
- The set of correlation functions of the first subcycle within a synchronisation cycle is stored in an averaging memory.
- The sets of correlation functions of the subsequent subcycles within a synchronisation cycle are combined with the available contents of the "averaging memory", to produce an average over all the sets of correlation functions within a synchronisation cycle.
- At the end of a synchronisation cycle, the Time-of-Arrival measurements for that synchronisation cycle are obtained by evaluating the final set of correlation functions.

These Time-of-Arrival measurements, together with associated SIR values obtained from the averaged correlation functions, are included in a Measurement Report to the CRNC, according to a measurement reporting plan.

In addition, the Time-of-Arrival measurements may optionally be used for autonomous self-adjustment of the timing of the respective cell.

# 8.2.21.2.4 [3.84Mcps TDD - Cell Sync Burst Transmission Reconfiguration] [1.28Mcps TDD - SYNC\_DL Code Transmission Reconfiguration]

When the [3.84Mcps TDD - Cell Sync Burst Transmission Reconfiguration Information] [1.28Mcps TDD - SYNC\_DL Code Transmission Reconfiguration Information LCR] is present, the Node B shall reconfigure the transmission of the [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD - SYNC\_DL Code] according to the parameters given in the CELL SYNCHRONISATION RECONFIGURATION REQUEST message.

[3.84Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *Cell Sync Burst Code* IE, the Node B shall reconfigure the synchronisation code in the cell according to the *Cell Sync Burst Code* IE value.]

[3.84Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *Cell Sync Burst Code Shift* IE, the Node B shall reconfigure the synchronisation code shift in the cell according to the *Cell Sync Burst Code Shift* IE value.]

[3.84Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *DL Transmission Power* IE, the Node B shall reconfigure the DL transmission power of the cell synchronisation burst in the cell according to the *DL Transmission Power* IE value.]

[1.28Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *DwPCH Power* IE, the Node B shall store the DwPCH power according to the *DwPCH Power* IE value. For the duration of those subsequent transmissions of the DwPCH which are specifically for the purpose of Node B synchronisation the power of the DwPCH shall be set to the stored power. During subsequent transmissions of the DwPCH which are for normal operation the power of the DwPCH shall assume its normal level.]

[1.28Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *Sync\_DL Code ID* IE, the Node B shall reconfigure the SYNC\_DL Code in the cell according to the *Sync\_DL Code ID* IE value.]

# 8.2.21.2.5 [3.84Mcps TDD - Cell Sync Burst Measurement Reconfiguration] [1.28Mcps TDD - SYNC DL Code Measurement Reconfiguration]

When the [3.84Mcps TDD - Cell Sync Burst Measurement Reconfiguration Information] [1.28Mcps TDD - Cell SYNC\_DL Code Measurement Reconfiguration Information LCR] is present, the Node B shall reconfigure the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] measurements according the parameters given in the message.

If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the [3.84Mcps TDD -Cell Sync Burst Measurement Information] [1.28Mcps TDD - SYNC\_DL Code Measurement Information LCR], the measurements shall apply on the individual [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC DL Codes] on the requested Sync Frame number.

[1.28Mcps TDD - When the *Propagation Delay Compensation* IE is present in the SYNC\_DL Code Measurement Information LCR, the Node B shall, if supported, perform the following functions: (1) use the respective SYNC\_DL measurement (after potential averaging) to perform the self-adjustment of the respective cell"s timing at the end of a Synchronisation Cycle; (2) include the *Accumulated Clock Update* IE in the CELL SYNCHRONISATION REPORT message, to report the total accumulated amount of timing adjustments since the last report to the RNC. This Accumulated Clock Update value shall also include the adjustments which may have been performed by explicit order from the CRNC in the CELL SYNCHRONISATION ADJUSTMENT REQUEST message. The times for self-adjustment at the end of a synchronisation cycle shall be independent from the measurement reporting characteristics; the Accumulated Adjustment values shall be included in the CELL SYNCHRONISATION REPORT messages without influencing the frequency of measurement reporting.]

If the *Synchronisation Report Type* IE is provided, the measurement reporting shall apply according the parameter given in the message.

## **Synchronisation Report characteristics:**

The *Synchronisation Report Characteristics* IE indicates how the reporting of the cell synchronisation burst measurement shall be performed.

If the *Synchronisation Report Characteristics Type* IE is set to "Frame related", the Node B shall report the result of the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] measurement after every measured frame.

If the *Synchronisation Report Characteristics Type* IE is set to "SFN period related", the Node B shall report the result of the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] measurements after every SFN period.

If the *Synchronisation Report Characteristics Type* IE is set to "Cycle length related", the Node B shall report the result of the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] measurements after every cycle length within the SFN period.

If the *Synchronisation Report Characteristics Type* IE is set to "Threshold exceeding", the Node B shall report the result of the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] measurement when the [3.84Mcps TDD - Cell Synchronisation Burst timing] [1.28Mcps TDD - SYNC\_DL Code timing] rises or falls more than the requested threshold value compared to the arrival time in synchronised state which is represented by the [3.84Mcps TDD - *Cell Sync Burst Arrival Time* IE] [1.28Mcps TDD - *SYNC\_DL Code ID Arrival Time* IE].

[3.84Mcps TDD - If the *Cell Sync Burst Arrival Time* IE is included in the *Cell Sync Burst Information* IE of the *Synchronisation Report Characteristics* IE, it indicates to the Node B the reference time at which the reception of the cell synchronisation burst of a neighbouring cell is expected.]

[3.84Mcps TDD - If the *Cell Sync Burst Timing Threshold* IE is included in the *Cell Sync Burst Information* IE of the *Synchronisation Report Characteristics* IE, the Node B shall use this new threshold as a trigger for the CELL SYNCHRONISATION REPORT message.]

[1.28Mcps TDD - If the SYNC\_DL Code ID Arrival Time IE is included in the SYNC\_DL Code Information LCR IE of the Synchronisation Report Characteristics IE, it indicates to the Node B the reference time at which the reception of the SYNC DL Code of a neighbouring cell is expected.]

[1.28Mcps TDD - If the SYNC\_DL Code ID Timing Threshold IE is included in the SYNC\_DL Code Information LCR IE of the Synchronisation Report Characteristics IE, the Node B shall use this threshold as a trigger for the CELL SYNCHRONISATION REPORT message.]

#### **Response message:**

If the Node B was able to reconfigure the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] transmission and/or measurement requested by the CRNC, it shall respond with the CELL SYNCHRONISATION RECONFIGURATION RESPONSE message sent over the Node B Control Port.

## 8.2.21.3 Unsuccessful Operation

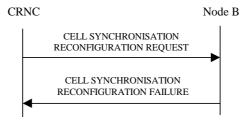


Figure 27F Cell Synchronisation Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot reconfigure the requested transmission or measurement on [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code], the CELL SYNCHRONISATION RECONFIGURATION FAILURE message shall be sent to the CRNC. The message shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

#### **Radio Network Layer Cause:**

- Cell Synchronisation not supported
- Power level not supported
- Measurement Temporarily not Available

#### **Miscellaneous Cause:**

- O&M Intervention

- HW failure

## 8.2.21.4 Abnormal Conditions

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# 8.2.22 Cell Synchronisation Reporting [TDD]

## 8.2.22.1 General

This procedure is used by a Node B to report the result of [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] measurements requested by the CRNC with the Cell Synchronisation Initiation or Cell Synchronisation Reconfiguration procedure.

## 8.2.22.2 Successful Operation



Figure 27G Cell Synchronisation Reporting procedure, Successful Operation

If the requested synchronisation measurement reporting criteria are met, the Node B shall initiate a Cell Synchronisation Reporting procedure. The CELL SYNCHRONISATION REPORT message shall use the Node B Control Port.

In the steady state phase when several [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC\_DL Codes] shall be measured per Sync Frame number, the sequence of the reported measured values shall be the same as defined in the Cell Synchronisation Reconfiguration procedure.

[1.28Mcps TDD - The Node B shall, if supported, include the *Accumulated Clock Update* IE in the CELL SYNCHRONISATION REPORT message whenever the CRNC has included at least one instance of the *Propagation Delay Compensation* IE in the CELL SYNCHRONISATION RECONFIGURATION REQUEST message. The *Accumulated Clock Update* IE shall include the accumulated timing adjustment which has been done as commanded by the CRNC, as well as by self-adjustment, since the last *Accumulated Clock Update* IE report.]

If the achieved measurement accuracy does not fulfil the given accuracy requirement defined in [23], the Cell Sync Burst not available shall be reported.

#### 8.2.22.3 Abnormal Conditions

# 8.2.23 Cell Synchronisation Termination [TDD]

## 8.2.23.1 General

This procedure is used by the CRNC to terminate a [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] transmission or measurement previously requested by the Cell Synchronisation Initiation procedure or Cell Synchronisation Reconfiguration procedure.

## 8.2.23.2 Successful Operation



Figure 27H Cell Synchronisation Termination procedure, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION TERMINATION REQUEST message, sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall terminate [3.84Mcps TDD - transmission of Cell Synchronisation Bursts or reporting of Cell Synchronisation Burst measurements] [1.28Mcps TDD - transmission of SYNC\_DL Codes or reporting of SYNC\_DL Code measurements] corresponding to the *CSB Transmission ID* IE or *CSB Measurement ID* IE.

## 8.2.23.3 Abnormal Conditions

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# 8.2.24 Cell Synchronisation Failure [TDD]

## 8.2.24.1 General

This procedure is used by the Node B to notify the CRNC that a [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] transmission or synchronisation measurement procedure can no longer be supported.

## 8.2.24.2 Successful Operation



Figure 27I Cell Synchronisation Failure procedure, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION FAILURE INDICATION message, sent from the Node B to the CRNC using the Node B Control Port, to inform the CRNC that a previously requested transmission or measurement on [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC\_DL Codes] can no longer be supported.

If the transmission of a [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] has failed, then the Node B shall include the *CSB Transmission ID* IE in the CELL SYNCHRONISATION FAILURE INDICATION message to uniquely identify the concerned [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] Transmission.

If the measurement of a [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] has failed, then the Node B shall include the *CSB Measurement ID* IE in the CELL SYNCHRONISATION FAILURE INDICATION message to uniquely identify the concerned [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC\_DL Code] Measurement.

## 8.2.24.3 Abnormal Conditions

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## 8.2.25 Cell Synchronisation Adjustment [TDD]

## 8.2.25.1 General

The purpose of Cell Synchronisation Adjustment procedure is to allow the CRNC to adjust the timing of the radio transmission of a cell within a Node B for time alignment.

## 8.2.25.2 Successful Operation

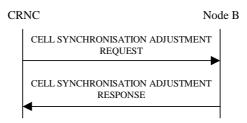


Figure 27J Cell Synchronisation Adjustment, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION ADJUSTMENT REQUEST message sent by the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B adjusts its timing according to the parameters given in the message.

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *Frame Adjustment Value* IE the Node B shall apply the frame adjustment in the cell according to the *Frame Adjustment Value* IE value.

[3.84Mcps TDD - If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *Timing Adjustment Value* IE the Node B shall apply the timing adjustment in the cell according to the *Timing Adjustment Value* IE value.]

[1.28Mcps TDD - If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *Timing Adjustment Value LCR* IE the Node B shall apply the timing adjustment in the cell according to the *Timing Adjustment Value LCR* IE value.]

[3.84Mcps TDD - If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *DL Transmission Power* IE, the Node B shall apply the transmission power of the Cell Synchronisation Burst according to the *DL Transmission Power* IE value.]

[1.28Mcps TDD - If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *DwPCH Power* IE, the Node B shall store the DwPCH power according to the *DwPCH Power* IE value. For the duration of those subsequent transmissions of the DwPCH which are specifically for the purpose of Node B synchronisation the power of the DwPCH shall be set to the stored power. During subsequent transmissions of the DwPCH which are for normal operation the power of the DwPCH shall assume its normal level.]

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *SFN* IE, the Node B shall apply the synchronisation adjustment starting with the SFN number indicated in the message.

When the cell synchronisation adjustment is successfully done by the Node B, the Node B shall respond with a CELL SYNCHRONISATION ADJUSTMENT RESPONSE message.

## 8.2.25.3 Unsuccessful Operation

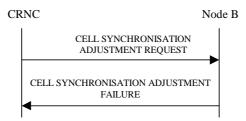


Figure 27K Cell Synchronisation Adjustment, Unsuccessful Operation

If the Node B cannot perform the indicated cell synchronisation adjustment due to hardware failure or other problem it shall send the CELL SYNCHRONISATION ADJUSTMENT FAILURE as a response.

Typical cause values are as follows:

#### Radio Network Layer Cause

- Cell Synchronisation Adjustment not supported
- Power level not supported

#### **Miscellaneous Cause**

- O&M Intervention
- HW failure

## 8.2.25.4 Abnormal Conditions

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# 8.2.26 Information Exchange Initiation

## 8.2.26.1 General

This procedure is used by a CRNC to request the initiation of information provisioning from a Node B.

## 8.2.26.2 Successful Operation

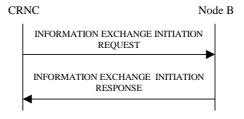


Figure 27L: Information Exchange Initiation procedure, Successful Operation

The procedure is initiated with the INFORMATION EXCHANGE INITIATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall provide the requested information according to the *Information Type Item* IE. Unless specified below, the meaning of the parameters are given in other specifications.

If the Information Type IE contains a GANSS Generic Data IE, at least one of the GANSS Navigation Model And Time Recovery, GANSS Time Model GNSS-GNSS, GANSS UTC Model, GANSS Almanac, GANSS Real Time Integrity,

GANSS Data Bit Assistance, GANSS Additional Navigation Models And Time Recovery, GANSS Additional UTC Models, GANSS Auxiliary Information IEs shall be present in the GANSS Generic Data IE.

- If the *GANSS Generic Data* IE does not contain the *GANSS ID* IE, the Node B shall assume that the corresponding GANSS is "Galileo".

### **Information Report Characteristics**

The Information Report Characteristics IE indicates how the reporting of the information shall be performed.

If the *Information Report Characteristics* IE is set to "On Demand", the Node B shall report the requested information immediately.

If the *Information Report Characteristics* IE is set to "Periodic", the Node B shall immediately report the requested information and then shall periodically initiate the Information Reporting procedure for all the requested information, with the requested reporting frequency.

If the *Information Report Characteristics* IE is set to "On Modification", the Node B shall immediately report the requested information if available. If the requested information is not available at the moment of receiving the INFORMATION EXCHANGE INITIATION REQUEST message, but expected to become available after some acquisition time, the Node B shall initiate the Information Reporting procedure when the requested information becomes available. The Node B shall then initiate the Information Reporting procedure in accordance to the following conditions related to the *Information Type* IE:

- 1) If the *Information Type Item* IE is set to "DGPS Corrections", the Node B shall initiate the Information Reporting procedure when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE in the *Information Threshold* IE or a change has occurred in the IODE.
- 2) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Navigation Model & Time Recovery", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred regarding either the IODC or the list of visible satellites, identified by the *Sat ID* IEs.
- 3) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Ionospheric Model", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 4) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS UTC Model", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred in the t<sub>ot</sub> or WN<sub>t</sub> parameter.
- 5) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Almanac", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change in the t<sub>oa</sub> or WN<sub>a</sub> parameter has occurred.
- 6) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Real-Time Integrity", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 7) If the *Information Type Item* IE is set to "DGANSS Corrections", the Node B shall initiate the Information Reporting procedure when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE in the *Information Threshold* IE or a change has occurred in the IOD.
- 8) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Navigation Model And Time Recovery* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred regarding either the IOD or the list of visible satellites, identified by the *Sat ID* IEs.
- 9) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Ionospheric Model* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred.
- 10) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Time Model* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred.

- 11) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS UTC Model* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t<sub>ot</sub> or WN<sub>t</sub> parameter.
- 12) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Almanac* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change in the  $T_{oa}$ ,  $IOD_a$  or Week Number parameter has occurred.
- 13) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Real Time Integrity* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred
- 14) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Data Bit Assistance* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred.
- 15)If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional Navigation Models And Time Recovery* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred regarding either the IOD or the list of visible satellites, identified by the *Sat ID* IEs.
- 16) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional Ionospheric Model* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred.
- 17) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional UTC Models* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t<sub>ot</sub>, WN<sub>ot</sub>, WN<sub>t</sub>, or N<sup>A</sup> parameter.
- 18) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Earth Orientation Parameters* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t<sub>EOP</sub> parameter.
- 19) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Auxiliary Information* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the *Signals Available* or *Channel Number* IE parameter.
- 20) If any of the above *Information Type* IEs becomes temporarily unavailable, the Node B shall initiate the Information Reporting procedure for this specific Information Item by indicating "Information Not Available" in the *Requested Data Value Information* IE. If the Information becomes available again, the Node B shall initiate the Information Reporting procedure for this specific Information.

#### Response message

If the Node B is able to initiate the information provision requested by the CRNC, it shall respond with the INFORMATION EXCHANGE INITIATION RESPONSE message sent over the Node B Control Port. The message shall include the same Information Exchange ID that was included in the INFORMATION EXCHANGE INITIATION REQUEST message. When the *Report Characteristics* IE is set to "On Modification" or "Periodic", the INFORMATION EXCHANGE INITIATION RESPONSE message shall contain the requested data if the data are available. When the *Report Characteristics* IE is set to "On Demand", the INFORMATION EXCHANGE INITIATION RESPONSE message shall contain the *Requested Data Value* IE.

If the Requested DataValue IE contains the GANSS Common Data IE, at least one of the GANSS Ionospheric Model, GANSS RX Pos, GANSS Additional Ionospheric Model, or GANSS Earth Orientation Parameters IEs shall be present.

Any GANSS Generic Data IE associated with a given GANSS included in the Requested DataValue IE shall contain at least one of the DGANSS Corrections, GANSS Navigation Model And Time Recovery, GANSS Time Model, GANSS UTC Model, GANSS Almanac, GANSS Real Time Integrity, GANSS Data Bit Assistance, GANSS Additional Time Models, GANSS Additional Navigation Models And Time Recovery, GANSS Additional UTC Models, or GANSS Auxiliary Information IEs.

- If the GANSS Generic Data IE does not contain the GANSS ID IE, the corresponding GANSS is "Galileo".

- The *DGANSS Corrections* IE contains one or several *DGANSS Information* IE(s), each of them associated with a GANSS Signal. A *DGANSS Information* IE for a particular GANSS that does not contain the *GANSS Signal ID* IE is by default associated with the default signal defined in [18], clause 10.3.3.45a.
- The *GANSS Real Time Integrity* IE contains one or several *Satellite Information* IEs, each of them associated with a satellite and a GANSS Signal. A *Satellite Information* IE for a particular GANSS that does not contain the *Bad GANSS Signal ID* IE is by default associated with all the signals of the corresponding satellite (see [39, 43, 44, 45, 46, 47 48]).

If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Time Model GNSS-GNSS* IE with exactly one bit set to value "1", the Node B shall include the *GANSS Time Model* IE in the *Requested Data Value* IE with the requested time information.

If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Time Model GNSS-GNSS* IE with more than one bit set to value "1, the Node B shall include the *GANSS Additional Time Models* IE in *Requested Data Value* IE with the requested time information for each GANSS.

## 8.2.26.3 Unsuccessful Operation

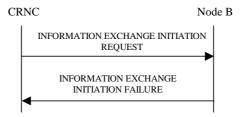


Figure 27M: Information Exchange Initiation procedure, Unsuccessful Operation

If the Information Type Item received in the *Information Type Item* IE indicates a type of information that cannot be provided, the Node B shall regard the Information Exchange Initiation procedure as failed.

If the requested information provision cannot be initiated, the Node B shall send the INFORMATION EXCHANGE INITIATION FAILURE message over the Node B control port. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

## Radio Network Layer Cause

- Information temporarily not available.
- Information Provision not supported for the object.

## 8.2.26.4 Abnormal Conditions

If the *Information Report Characteristics* IE is set to "On Modification", and the *Information Type Item* IE is set to "DGPS Corrections", or "DGANSS Corrections", but the *Information Threshold* IE is not received in the INFORMATION EXCHANGE INITIATION REQUEST message, the Node B shall regard the Information Exchange Initiation procedure as failed.

If the *Information Type Item* IE is not set to "DGPS Correction" or "DGANSS Corrections", the *Information Report Characteristics* IE is set to "On Modification" and the *Information Threshold* IE is included in the INFORMATION EXCHANGE INITIATION REQUEST message, the Node B shall regard the Information Exchange Initiation procedure as failed.

## 8.2.27 Information Reporting

## 8.2.27.1 General

This procedure is used by a Node B to report the information requested by the CRNC with the Information Exchange Initiation procedure.

## 8.2.27.2 Successful Operation



Figure 27N: Information Reporting procedure, Successful Operation

If the requested information reporting criteria are met, the Node B shall initiate the Information Reporting procedure. The INFORMATION REPORT message shall use the Node B Control Port. Unless specified below, the meaning of the parameters are given in other specifications.

The *Information Exchange ID* IE shall be set to the Information Exchange ID provided by the CRNC when initiating the Information Exchange with the Information Exchange Initiation procedure.

The Requested Data Value IE shall include at least one IE containing the data to be reported.

## 8.2.27.3 Abnormal Conditions

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# 8.2.28 Information Exchange Termination

## 8.2.28.1 General

This procedure is used by the CRNC to terminate the provision of information previously requested by the Information Exchange Initiation procedure.

## 8.2.28.2 Successful Operation



Figure 270: Information Exchange Termination procedure, Successful Operation

This procedure is initiated with an INFORMATION EXCHANGE TERMINATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall terminate the provision of information corresponding to the Information Exchange ID.

## 8.2.28.3 Abnormal Conditions

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## 8.2.29 Information Exchange Failure

## 8.2.29.1 General

This procedure is used by the Node B to notify the CRNC that information previously requested by the Information Exchange Initiation procedure can no longer be reported.

## 8.2.29.2 Successful Operation



Figure 27P: Information Exchange Failure procedure, Successful Operation

This procedure is initiated with the INFORMATION EXCHANGE FAILURE INDICATION message sent from the Node B to the CRNC using the Node B Control Port to inform the CRNC that information previously requested by the Information Exchange Initiation procedure can no longer be reported. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

## 8.2.30 MBMS Notification Update

## 8.2.30.1 General

This procedure is used to update the MBMS Notification Indicators to be sent over the MICH.

## 8.2.30.2 Successful Operation



Figure 27Q: MBMS Notification Update procedure, Successful Operation

The procedure is initiated with an MBMS NOTIFICATION UPDATE COMMAND message sent from the CRNC to the Node B using the Node B Control Port.

The Node B shall use the different NIs in the *NI Information* IE to generate, as specified in ref. [7], the notification indicators it shall transmit on the MICH starting at the next coming MICH CFN equal to the value in the *MICH CFN* IE and for a duration equal to the Modification Period. If the value of *MICH CFN* IE is the same as the one in a previously received MBMS NOTIFICATION UPDATE COMMAND message, and if the MICH CFN occurrence has not been reached yet, the Node B shall overwrite the value of the *NI Information* IE in the previously received MBMS NOTIFICATION UPDATE COMMAND message.

If the *Modification Period* IE is included in the MBMS NOTIFICATION UPDATE COMMAND message, the Node B shall use this as the new Modification Period starting at the next coming MICH CFN equal to the value in the *MICH CFN* IE. If the value of *MICH CFN* IE is the same as the one in a previously received MBMS NOTIFICATION UPDATE COMMAND message, and if the MICH CFN occurrence has not been reached yet, the Node B shall overwrite the value of the *Modification Period* IE in the previously received MBMS NOTIFICATION UPDATE COMMAND message.

If the *Modification Period* IE is not included in the MBMS NOTIFICATION UPDATE COMMAND message, the Node B shall use the lastest stored Modification Period.

## 8.2.30.3 Abnormal Conditions

If the *Modification Period* IE is not included in the MBMS NOTIFICATION UPDATE COMMAND message and no Modification Period is stored in the Node B, the Node B shall initiate the Error Indication procedure.

## 8.2.31 UE Status Update [FDD and 1.28Mcps TDD]

## 8.2.31.1 General

This procedure is used by the CRNC to inform NodeB that one or several E-RNTIs, previously allocated to UEs in CELL\_FACH state, may be released as the UE no longer use the E-RNTI.

## 8.2.31.2 Successful Operation



Figure 27R: UE Status Update procedure, Successful Operation

The procedure is initiated with a UE STATUS UPDATE COMMAND message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception of the UE STATUS UPDATE COMMAND message, the Node B may use the information about vacant E-RNTI in *Vacant E-RNTI* IE in *Cell E-RNTI status information* IE to determine which E-RNTIs are no longer used in the cell and thus allowed to be allocated to another UE using E-DCH

## 8.2.31.3 Abnormal Conditions

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# 8.3 NBAP Dedicated Procedures

## 8.3.1 Radio Link Addition

## 8.3.1.1 General

This procedure is used for establishing the necessary resources in the Node B for one or more additional RLs towards a UE when there is already a Node B Communication Context for this UE in the Node B.

The Radio Link Addition procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

## 8.3.1.2 Successful Operation

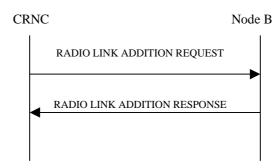


Figure: 28 Radio Link Addition procedure, Successful Operation

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon reception, the Node B shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

## **Physical Channels Handling:**

[TDD - If the [3.84Mcps TDD - *UL DPCH Information IE*] [1.28Mcps TDD - *UL DPCH Information LCR* IE] [7.68Mcps TDD - *UL DPCH Information 7.68Mcps IE*] is present, the Node B shall configure the new UL DPCH(s) according to the parameters given in the message.]

[TDD - If the [3.84Mcps TDD - *DL DPCH Information IE*] [1.28Mcps TDD - *DL DPCH Information LCR* IE] [7.68Mcps TDD - *DL DPCH Information 7.68Mcps* IE] is present, the Node B shall configure the new DL DPCH(s) according to the parameters given in the message.]

[1.28Mcps TDD - If the  $UL\ Timeslot\ Information\ LCR$  IE includes the  $PLCCH\ Information$  IE, the Node B shall transmit TPC /SS bits on a PLCCH according to the parameters given in the message.]

## [FDD - Compressed Mode]:

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Compressed Mode Deactivation Flag* IE with value "Deactivate", the Node B shall not activate any compressed mode pattern in the new RLs. In all the other cases (Flag set to "Maintain Active" or not present), the ongoing compressed mode (if existing) shall be applied also to the added RLs.]

[FDD - If the Node B Communication Context is configured to use DPCH in the downlink and if the RADIO LINK ADDITION REQUEST message contains the *Transmission Gap Pattern Sequence Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated for each DL Channelisation Code for which the *Transmission Gap Pattern Sequence Code Information* IE is set to "Code Change".]

## [FDD - DL Code Information]:

[FDD - When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to ref. [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *pth* to "*PhCH number p*".]

## [TDD - CCTrCH Handling]:

[TDD - If the *UL CCTrCH Information* IE is present, the Node B shall configure the new UL CCTrCH(s) according to the parameters given in the message.]

[1.28Mcps TDD - If the *UL CCTrCH Information* IE includes the *TDD TPC UL Step Size* IE, the Node B shall configure the uplink TPC step size according to the parameters given in the message, otherwise it shall use the step size configured in other radio link.]

[TDD - If the *DL CCTrCH Information* IE is present, the Node B shall configure the new DL CCTrCH(s) according to the parameters given in the message.]

[TDD - If the *DL CCTrCH Information* IE includes the *TDD TPC DL Step Size* IE, the Node B shall configure the downlink TPC step size according to the parameters given in the message, otherwise it shall use the step size configured in other radio link.]

[1.28 Mcps TDD - The Node B shall configure the HS-SCCH TPC step size to the same value as the *TDD TPC DL Step Size* IE of the lowest numbered DL CCTrCH whose *DL CCTrCH Information* IE includes the *TDD TPC DL Step Size* IE. If no *DL CCTrCH Information* IE includes the *TDD TPC DL Step Size* IE, it shall use the step size configured in other radio link.]

[1.28 Mcps TDD - If the *TDD TPC DL Step Size* IE is not included in the *DL CCTrCH Information* IE, the Node B shall use the *E-AGCH TPC step size* IE in the *E-PUCH Information LCR* IE in the *E-DCH Information 1.28Mcps* IE for HS-SCCH inner loop power control related operation.]

#### **Radio Link Handling:**

#### **Diversity Combination Control:**

The *Diversity Control Field* IE indicates for each RL whether the Node B shall combine the new RL with existing RL(s) or not.

- If the Diversity Control Field IE is set to "May", the Node B shall decide for any of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL.
- If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

[FDD - The signalled *Diversity Control Field* IE is only applicable for DCHs. In case of E-DCH, if any UARFCN(s) of the cells in the added RL(s) is not equal to at least one of the UARFCN(s) of the cells in the existing RL(s) in the Node B Communication Context, the Diversity Control Field, for those RL(s) shall be assumed to be set to "May", otherwise it shall be assumed to be set to "Must".]

When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with.

In the case of not combining a RL with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or a RL previously listed in the RADIO LINK ADDITION RESPONSE message, the Node B shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that no combining is done. In this case, the Node B shall:

- include in the DCH Information Response IE both the Transport Layer Address IE and the Binding ID IE for the transport bearer to be established for each DCH of the RL in the RADIO LINK ADDITION RESPONSE message. [FDD for which the Transport Bearer Not Requested Indicator IE was not included].
- [FDD include in the RADIO LINK ADDITION RESPONSE message the *Transport Bearer Not Setup Indicator* IE for every DCH for which establishment of a transport bearer has not taken place as a result of information in the *Transport Bearer Not Requested Indicator* IE in the RADIO LINK ADDITION REQUEST message.]
- [FDD For E-DCH, include in the *E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearers to be established for each E-DCH MAC-d flow of this RL for which the *Transport Bearer Not Requested Indicator* IE was not included.]

In the case of combining with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or with a RL previously listed in this RADIO LINK ADDITION RESPONSE message, the Node B shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that the RL is combined and if the ALCAP is not used [FDD - and the transport bearer for this DCH is already established], the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE included in the *RL Information* IE for a specific RL in the RADIO LINK ADDITION REQUEST message, shall not be used. In this case, the *RL ID* IE indicates (one of) the

previously established RL(s) or a RL previously listed in this RADIO LINK ADDITION RESPONSE message with which the new RL is combined.

[FDD - In the case of combining with an E-DCH RL established with a previous Radio Link Setup or Radio Link Addition Procedure or with a RL previously listed in this RADIO LINK ADDITION RESPONSE message, one of the previously established RLs or a RL previously listed in this RADIO LINK ADDITION RESPONSE message including the *E-DCH FDD Information Response* IE shall be regarded as the RL with which the concerned E-DCH RL is combined. In case E-DCH RL is established for the first time, the Node B shall include *E-DCH FDD Information Response* IE instead of using the Diversity Indication of DCH RL in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message. It shall include in the *E-DCH FDD Information Response* IE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearers to be established for each E-DCH MAC-d flow of this E-DCH RL for which the *Transport Bearer Not Requested Indicator* IE was not included.]

In the case of a set of co-ordinated DCHs, the *Binding ID* IE and the *Transport Layer Address* IE shall be included for only one of the DCHs in a set of coordinated DCHs [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included].

[TDD - The Node B shall include in the RADIO LINK ADDITION RESPONSE message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH and USCH.]

#### [FDD - Transmit Diversity]:

[FDD - If the *Transmit Diversity Indicator* IE and/or *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Addition* IE is included in the RADIO LINK ADDITION REQUEST message, the Node B shall activate/deactivate the Transmit Diversity for each new Radio Link and/or secondary serving HS-DSCH Radio Link in accordance with the *Transmit Diversity Indicator* IE and/or *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information* IE and the already known diversity mode for the physical channel.]

#### **DL Power Control:**

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DL DPCH or on the F-DPCH of the RL when starting transmission until either UL synchronisation on the Uu interface is achieved for the RLS or Power Balancing is activated. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing RLs for this Node B Communication Context. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) with DPC MODE currently configured for the relevant Node B Communication Context and the downlink power control procedure (see subclause 8.3.7).]

[3.84 Mcps TDD and 7.68Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCHs for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4).]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Initial DL Transmission Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the initial DL power and ignore the *DL Time Slot ISCP info LCR*, otherwise the initial DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE and if *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specifiedin [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX

power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing RL/timeslots for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power* IE, the Node B shall store this value and not transmit with a higher power on any DL DPCH or on the F-DPCH of the RL. If no *Maximum DL Power* IE is included, any Maximum DL power stored for already existing RLs for this Node B Communication Contextshall be applied. If the Node B Communication Context is configured to use DPCH in the downlink, during compressed mode, the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power* IE, the Node B shall store this value and never transmit with a lower power on any DL DPCH or on the F-DPCH of the RL. If no *Minimum DL Power* IE is included, any Minimum DL power stored for already existing RLs for this Node B Communication Context shall be applied.]

[3.84 Mcps TDD and 7.68Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power* IE, the Node B shall determine the maximum CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the maximum CCTrCH DL power, otherwise the maximum CCTrCH DL power is the *Maximum DL Power* IE included in the *RL Information* IE. If no *Maximum DL Power* IE is included (even if *CCTrCH Maximum DL Transmission Power* IEs are included), any maximum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]

[3.84 Mcps TDD and 7.68Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power* IE, the Node B shall determine the minimum CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the minimum CCTrCH DL power, otherwise the minimum CCTrCH DL power is the *Minimum DL Power* IE included in the *RL Information* IE. If no *Minimum DL Power* IE is included (even if *CCTrCH Minimum DL Transmission Power* IEs are included), any minimum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power* IE, the Node B shall determine the maximum DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Maximum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL DPCH. If no *Maximum DL Power* IE is included, any maximum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power* IE, the Node B shall determine the minimum DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Minimum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL DPCH. If no *Minimum DL Power* IE is included, any minimum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

[3.84Mcps TDD and 7.68Mcps TDD - The initial power, maximum power, and minimum power for DSCH type CCTrCH shall be determined as follows:

- If the DSCH type CCTrCH is paired with an uplink CCTrCH(s) for inner loop power control, the minimum, maximum and initial power for each PDSCH is determined in the same way as described above for DCH type CCTrCHs.

- If the DSCH type CCTrCH is not paired with an uplink CCTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCTrCHs. The minimum and initial powers, however, are subject to control by the CRNC via the frame protocol].

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Initial DL* Transmission Power IE, the Node B shall determine the initial DL power for each timeslot within a DSCH type CCTrCH by the following rule: If both the CCTrCH Initial DL Transmission Power IE, included in the DL CCTrCH Information IE, and the DL Time Slot ISCP Info LCR IE, included in the RL Information IE, are included then the Node B shall use that power for the PDSCH and ignore the Initial DL Transmission Power IE included in the RL Information IE, otherwise the initial DL Power is the Initial DL Transmission Power IE included in the RL Information IE and if DL Time Slot ISCP info LCR IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall apply the given power to the transmission on each DL PDSCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no Initial DL Transmission Power IE is included, the Node B shall use any transmission power level currently used on already existing RL/timeslots for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power* IE, the Node B shall determine the maximum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable PDSCH. If no *Maximum DL Power* IE is included, any maximum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power* IE, the Node B shall determine the minimum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable PDSCH. If no *Minimum DL Power* IE is included, any minimum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

[3.84Mcps TDD and 7.68Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *DL Time Slot ISCP Info* IE, the Node B shall use the indicated value when deciding the DL TX Power for each timeslot as specified in ref. [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged.]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Individual" in the existing RL(s) and the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power* IE, the Node B shall activate the power balancing and use the *DL Reference Power* IE for the power balancing procedure in the new RL(s), if activation of power balancing by the RADIO LINK ADDITION REQUEST message is supported, according to subclause 8.3.7. In this case, the Node B shall include the *DL Power Balancing Activation Indicator* IE in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message. If the Node B starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing, i.e.  $P_{init}$  shall be set to the power level indicated by the *Initial DL Transmission Power* IE (if received) or the decided DL TX power level on each DL channelisation code of a RL based on power level of existing RLs.]

## [1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:

[1.28Mcps TDD - If the RADIO LINK ADDITION REQUEST message contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]

## [1.28Mcps TDD - Power Control GAP:]

[1.28Mcps TDD - If the *Power Control GAP* IE is included in the RADIO LINK ADDITION REQUEST message, the Node B may use the value for the power control for HS-SCCH and HS-SICH according to the [21].]

[1.28Mcps TDD - E-UTRAN Inter-RAT measurement:]

[1.28Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the Idle Interval Information IE, if supported, the Node B shall use the value for E-UTRAN Inter-RAT measurement according to the [18].

#### [FDD – HS-DSCH Preconfiguration for Enhanced HS Serving Cell Change]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH Preconfiguration Setup* IE in the *RL Information* IE for a Radio Link not indicated by the *HS-DSCH RL ID* IE in the *HS-DSCH Serving Cell Change Information* IE the Node B shall if supported preconfigure the indicated cells or Enhanced HS Serving Cell Change according to [49.]:

- [FDD The Node B shall preconfigure sets of HS-SCCH codes on the cells preconfigured for HS-DSCH, primary serving HS-DSCH cell, as well as on the secondary serving HS-DSCH cells. The primary serving HS-DSCH cell is designated through the *C-ID* IE part of the *RL Information* IE in the RADIO LINK ADDITION REQUEST message. The list of secondary serving HS-DSCH cells is designated by the list of *Secondary C-ID*s in the *HS-DSCH Preconfiguration Setup* IE part of the *RL Information* IE in the RADIO LINK ADDITION REQUEST message. ]
- [FDD The number of HS-SCCH codes to preconfigure for each cell may be optionally specified:]
  - [FDD - by the *Num Primary HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Setup* IE, for the primary serving HS-DSCH cell]
  - [FDD - by the *Num Secondary HS-SCCH Codes* IE in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE for each of the secondary serving HS-DSCH cells]
- [FDD If *Num Primary HS-SCCH Codes* IE or *Num Secondary HS-SCCH Codes* IE is not included in the message the number and distribution of codes on primary and any secondary cells shall be preconfigured to satisfy any limitations in [10].]
- [FDD The Node B shall return these codes in the Sets of HS-SCCH Codes IE in the HS-DSCH Preconfiguration Info IE in the RL Information Response IE of the RADIO LINK ADDITION RESPONSE message or in the Successful RL Information Response IE of the RADIO LINK ADDITION FAILURE message.]
- [FDD The Node B shall use the first in the numbered list of the primary serving HS-DSCH cell"s HS-SCCH codes in the *HS-SCCH Preconfigured Codes* IE sent to the RNC to signal the Target Cell HS-SCCH Order defined in [18].]
- [FDD The Node B shall include, in the HS-DSCH Preconfiguration Info IE in the RL Information Response IE in the RADIO LINK ADDITION RESPONSE message or in the Successful RL Information Response IE of the RADIO LINK ADDITION FAILURE message, IEs according to the rules defined for HS-DSCH Setup at Serving HS-DSCH Radio Link Change and: ]
  - [FDD - if *HARQ Preamble Mode* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *HARQ Preamble Mode Activation Indicator* IE]
  - [FDD - if *MIMO Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE ]
  - [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used for the cell in the preconfigured configuration the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell]
  - [FDD - if Sixtyfour QAM Usage Allowed Indicator is included in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE or in the *HS-DSCH Preconfiguration Setup* IE the *SixtyfourQAM DL Usage Indicator* IE for each preconfigured cell]

- [FDD - if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE]
- [FDD If the UE with enhanced HS-SCCH support indicator IE is included in the HS-DSCH Preconfiguration Setup IE, then the Node B shall store this information in the preconfigured configuration.]
- [FDD - If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the Node B may store this information in the preconfigured configuration.]
- [FDD The Node B shall include in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message or in the *Successful RL Information Response* IE of the RADIO LINK ADDITION FAILURE message the *E-DCH FDD DL Control Channel Information* containing the preconfigured configuration of the E-DCH serving cell according to the rules defined for Serving E-DCH Radio Link Change as follows: ]
  - [FDD The Node B shall allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE.]
  - [FDD The Node B may configure for the preconfigured configuration the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving E-DCH RL and include these values in the *E-DCH FDD DL Control Channel Information* IE.]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Non-Serving RL Preconfiguration Setup* IE in the *RL Information* IE and:]

- [FDD if the choice of *new Serving RL* is "New Serving RL in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE and/or *New non-serving RL E-DCH FDD DL Control Channel Information B* IE in the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK ADDITION RESPONSE message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL Not in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information C* IE in the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK ADDITION RESPONSE message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL in the Node B or New Serving RL Not in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE, the *New non-serving RL E-DCH FDD DL Control Channel Information B* IE and/or the *New non-serving RL E-DCH FDD DL Control Channel Information C* for the RL in the *Non-Serving RL Preconfiguration Info* IE in the RADIO LINK ADDITION RESPONSE message.]

### General:

If the RADIO LINK ADDITION REQUEST message includes the *RL Specific DCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DCH or the set of co-ordinated DCHs [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included].

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for a DCH, then the Node B shall not establish a transport bearer for the concerned DCH and shall include the *Transport Bearer Not Setup Indicator* IE for every corresponding DCH in the RADIO LINK ADDITION RESPONSE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for a DCH and:]

[FDD - if the Node B establishes a transport bearer for the concerned DCH, the Node B shall include in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the DCH being established.]

- [FDD - if the Node B does not establish a transport bearer for the concerned DCH, the Node B shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH in the RADIO LINK ADDITION RESPONSE message.]

If the RADIO LINK ADDITION REQUEST message includes the *RL Specific E-DCH Information* IE, the Node B may use the transport layer addresses and the binding identifiers received from the CRNC when establishing transport bearers for the MAC-d flows of the E-DCHs.

The Node B shall start reception on the new RL(s) after the RLs are successfully established.

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Initial DL DPCH Timing Adjustment Allowed* IE, then the Node B may perform an initial DL DPCH Timing Adjustment (i.e. perform a timing advance or a timing delay with respect to the SFN timing) on a Radio Link. In this case, the Node B shall include, for the concerned Radio Link(s), the *Initial DL DPCH Timing Adjustment* IE in the *Radio Link Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Synchronisation Indicator* IE, set to "Timing Maintained Synchronisation", the Node B shall use synchronisation procedure B according to subclause 4.3.2.4 in [10]. The Node B shall select the TPC pattern as if "first RLS indicator" is set to "first RLS" according to subclause 5.1.2.2.1.2 in [10].]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *F-DPCH Slot Format* IE and if the Node B Communication Context is configured to use F-DPCH in the downlink, then the Node B shall use this information to configure the F-DPCH slot format of each RL according to [7].]

## [FDD - Radio Link Set Handling]:

[FDD - For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication Context. In case of E-DCH, the generation of E-HICH related information for RLs in different RL Sets shall not be common.]

[FDD - For all RLs having a common generation of the TPC commands in the DL with another new or existing RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication Context. In case of E-DCH, the generation of E-HICH information for all RLs in a RL Set shall be common.]

[FDD - After addition of the new RL(s), the UL out-of-sync algorithm defined in [10] shall, for each of the previously existing and newly established RL Set(s), use the maximum value of the parameters N\_OUTSYNC\_IND and T\_RLFAILURE that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters N\_INSYNC\_IND, that are configured in the cells supporting the radio links of the RL Set.]

[FDD - For each E-DCH RL which has or can have a common generation of E-RGCH information with another RL (current or future) when the Node B would contain the E-DCH serving RL, the Node B shall include the *E-DCH RL Set ID* IE in the RADIO LINK ADDITION RESPONSE message. The value of the *E-DCH RL Set ID* IE shall allow the RNC to identify the E-DCH RLs that have or can have a common generation of E-RGCH information.]

## [FDD - Serving HS-DSCH Radio Link Change]:

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH Serving Cell Change Information* IE, then *HS-PDSCH RL ID* IE indicates the new Serving HS-DSCH Radio Link:]

- [FDD In the new configuration the Node B shall allocate the HS-PDSCH resources for the new Serving HS-PDSCH Radio Link.]
- [FDD The Node B may include the *HARQ Memory Partitioning* IE in the *HS-DSCH FDD Information* Response IE in the RADIO LINK ADDITION RESPONSE message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- [FDD If the Node B Communication Context is configured with Sixtyfour QAM allowed for the serving HS-DSCH Radio Link and not used in the current configuration and then if the Node B decides to use 64 QAM in the new configuration, then it shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]

## [FDD - HS-DSCH Setup on a New Radio Link at Serving HS-DSCH Radio Link Change:]

[FDD - If the *HS-DSCH Information* IE is present in the *HS-DSCH Serving Cell Change Information* IE, then:]

- [FDD The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.]
- [FDD the *HS-DSCH Information* IE defines the new HS-DSCH configuration in the Node B to be used on the new HS-DSCH Radio Link.]
- [FDD The Node B shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message. The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.]
- [FDD The Node B shall include the HS-DSCH Initial Capacity Allocation IE in the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK ADDITION REQUEST message includes HS-DSCH MAC-d PDU Size Format IE in the HS-DSCH Information IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the HS-DSCH Initial Capacity Allocation IE the values for the peer of Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE to the values of the corresponding peer received in RADIO LINK ADDITION REQUEST in the HS-DSCH MAC-d Flows Information IE in the HS-DSCH Information IE for a Priority Queue including Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]

- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK ADDITION RESPONSE message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the Node B shall not include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].]
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- [FDD If the *MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B shall activate the MIMO mode for the HS-DSCH Radio Link and the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B may use:]
  - [FDD a different HS-SCCH in consecutive TTIs for this UE.]
  - [FDD HS-SCCH orders for the case of HS-SCCH-less operation to this UE.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE the Node B may use the supported HSDPA functions for this UE.
- [FDD If the RADIO LINK ADDITION REQUEST message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the *DL RLC PDU Size Format* IE may be used by the Node B to determine the allocated capacity on user plane as described in [24].]
- [FDD If the *Serving Cell Change CFN* IE is included into the RADIO LINK ADDITION REQUEST message, then the Node B shall activate the resources that are allocated for the new serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC. In the new configuration the Node B shall, if applicable, de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link. The Node B shall deactivate those resources at the next coming CFN with a value equal to the value requested by the RNC.]

- [FDD If the Serving Cell Change CFN IE is not included then the Node B shall activate immediately the resources that are allocated for the new serving HS-PDSCH Radio Link, and shall keep active the resources that are allocated for the previous serving HS-PDSCH Radio Link.]
- [FDD If the *Serving Cell Change* CFN IE is not included into the RADIO LINK ADDITION REQUEST message, then the Node B shall include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow for the serving HS-PDSCH RL into the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *HS-DSCH Information* IE is present in the *HS-DSCH Serving Cell Change Information* IE, then the Node B shall include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow for the serving HS-PDSCH RL into the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the Node B needs a bearer re-arrangement, then the Node B may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow for the serving HS-PDSCH RL into the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If a reset of the MAC-hs is not required the Node B shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the requested Serving HS-DSCH Radio Link Change was successful or unsucessful, the Node B shall indicate this in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *HS-DSCH Serving Cell Change Information* IE includes the *Continuous Packet Connectivity HS-SCCH less Information* IE, then:]
  - [FDD The Node B shall configure the new Serving HS-DSCH Radio Link for Continuous Packet Connectivity HS-SCCH less operation according to [10].]
  - [FDD The Node B shall allocate the HS-PDSCH codes needed for HS-SCCH less operation and include the Continuous Packet Connectivity HS-SCCH less Information Response IE in the HS-DSCH Serving Cell Change Information Response IE.]
  - [FDD If at least one of *HS-PDSCH Second Code Support* IE is set to "True", then the Node B shall include *HS-PDSCH Second Code Index* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *HS-DSCH Serving Cell Change Information* IE includes the *Continuous Packet Connectivity DTX-DRX Information* IE, then:]
  - [FDD The Node B shall configure the concerned Node B Communication Context for Continuous Packet Connectivity DTX operation according to [10].]
  - [FDD If *DRX Information* IE is included in the *Continuous Packet Connectivity DTX-DRX Information* IE, then the Node B shall configure the concerned Node B Communication Context for Continuous Packet Connectivity DRX operation according to [10].]

## [FDD – Secondary Serving HS-DSCH Radio Link Change]:

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Additional HS Cell Information RL Addition* IE, then *HS-PDSCH RL ID* IE indicates the new secondary serving HS-DSCH Radio Link:]

- [FDD In the new configuration the Node B shall allocate the HS-PDSCH resources for the new Secondary Serving HS-PDSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Secondary Serving Information Response* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the Node B Communication Context is configured with Sixtyfour QAM allowed for the secondary serving HS-DSCH Radio Link and not used in the current configuration and then if the Node B decides to use 64 QAM in the new secondary serving HS-DSCH Radio Link, then it shall include the *SixtyfourQAM DL Usage*

Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK ADDITION RESPONSE message.]

# [FDD - Secondary Serving HS-DSCH Setup on a New Radio Link at Secondary Serving HS-DSCH Radio Link Change:]

- [FDD The Node B shall setup the requested HS-PDSCH resources on the secondary serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.]
- [FDD The *HS-DSCH FDD Secondary Serving Information* IE defines the new secondary serving HS-DSCH configuration in the Node B to be used on the new secondary serving HS-DSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the HS-SCCH Power Offset IE in the HS-DSCH FDD Secondary Serving Information IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and include the HS-SCCH Specific Secondary Serving Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change Information Response IE in the Additional HS Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change Information Response IE in the Additional HS Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE with value set to "not allowed", then the Node B shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If Sixtyfour QAM will not be used for the secondary serving HS-DSCH Radio Link, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *Diversity Mode* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Addition* IE in the RADIO LINK ADDITION REQUEST message the Node B shall apply cell specific transmit diversity configuration and if the *Diversity Mode* IE is not set to "None" the Node B shall activate/deactivate the Transmit Diversity for the secondary serving HS-DSCH Radio Link in accordance with the *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information* IE.]
- [FDD If the Serving Cell Change CFN IE is included into the RADIO LINK ADDITION REQUEST message, then the Node B shall activate the resources that are allocated for the new secondary serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC. In the new configuration the Node B shall, if applicable, de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link. The Node B shall deactivate those resources at the next coming CFN with a value equal to the value requested by the RNC.]
- [FDD If the Serving Cell Change CFN IE is not included then the Node B shall activate immediately the resources that are allocated for the new serving HS-PDSCH Radio Link, and shall keep active the resources that are allocated for the previous serving HS-PDSCH Radio Link.]
- [FDD If the requested Secondary Serving HS-DSCH Radio Link Change was successful or unsucessful, the Node B shall indicate this in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

## [FDD - E-DCH]:

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE, then for every such RL:]

- [FDD The Node B shall setup the E-DCH resources as configured in the Node B Communication Context.]
- [FDD The Node B may include the E-AGCH And E-RGCH/E-HICH FDD Scrambling Code IE and shall include the E-RGCH/E-HICH Channelisation Code IE and the corresponding E-HICH Signature Sequence IE and the Node B may include the corresponding E-RGCH Signature Sequence IE in the E-DCH FDD DL Control Channel Information IE in RL Information Response IE for every RL indicated by the E-DCH RL Indication IE, set to 'E-DCH' in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the E-RGCH Power Offset IE in the RL Specific E-DCH Information IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the E-HICH Power Offset IE in the RL Specific E-DCH Information IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]

#### [FDD - Serving E-DCH Radio Link Change:]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Serving E-DCH RL* IE, then *Serving E-DCH RL* IE indicates the new Serving E-DCH Radio Link:]

- [FDD If the new Serving E-DCH RL is in this Node B:]
  - [FDD The Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message for the initial grant for the new serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK ADDITION RESPONSE message for the new serving E-DCH RL.]
- [FDD The Node B may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Signature Sequence* IE or may alternatively include the *E-RGCH Release Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message for any of the other E-DCH Radio Links in the Node B Communication Context that have not been included in the *E-DCH FDD DL Control Channel Information* IE in *RL Information Response* IE.]
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK ADDITION REQUEST message, then the Node B shall activate the resources that are allocated for the new serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC. In the new configuration the Node B shall, if applicable, de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link. The Node B shall deactivate those resources at the next coming CFN with a value equal to the value requested by the SRNC.]
- [FDD If the *Serving Cell Change CFN* IE is not included then the Node B shall activate immediately the resources that are allocated for the new serving E-DCH Radio Link.]
- [FDD If the addition of the requested Serving E-DCH Radio Link was successful but the Serving E-DCH Radio Link change was unsuccessful, the Node B shall indicate this in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

## [FDD - E-DPCH Handling]:

[FDD - If the RADIO LINK ADDITION REQUEST message includes an *E-DPCH Information* IE it defines the new E-DPCH configuration in the Node B to be used on the new E-DCH Radio Link and the Node B shall use the new parameters for the related resource allocation operations.]

[FDD - If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DPDCH Power Interpolation* IE, the Node B shall use the value to determine the applicable E-DPDCH power formula defined in [10]. If the *E-DPDCH Power Interpolation* IE is not present, the Node B shall use the E-DPDCH power extrapolation formula defined in [10].]

[FDD - If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the Node B shall use the information according to [10]. If the *E-TFCI Boost Information* IE is not present, the Node B shall use the E-TFCI BetaEC Boost value "127" in the algorithm defined in [10].]

[FDD - If the RADIO LINK ADDITION REQUEST message includes an *E-DPCH Information* IE, which contains the *Minimum Reduced E-DPDCH Gain Factor* IE, then the Node B shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the Node B Communication Context, the Node B may use the default value defined in [18].

### [FDD - E-DCH Setup on a new Radio Link:]

[FDD - If the E-DCH FDD Information IE is present in the RADIO LINK ADDITION REQUEST message:]

- [FDD the *E-DCH FDD Information* IE defines the new E-DCH FDD configuration in the Node B to be used on the new E-DCH Radio Link.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel information* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this Node B:]
  - [FDD The Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for
    the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding
    E-AGCH in the E-DCH FDD DL Control Channel Information IE in the E-DCH Serving Cell Change
    Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message for the initial grant for the serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new configuration and include the new configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK ADDITION RESPONSE message for the serving E-DCH RL.]

- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK ADDITION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If in the RADIO LINK ADDITION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Reference Power Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *SixteenQAM UL Operation Indicator* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for an E-DCH MAC-d flow, then the Node B shall not establish a transport bearer for the concerned E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK ADDITION RESPONSE message.]

- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for an E-DCH MAC-d flow and:]
  - [FDD if the Node B establishes a transport bearer for the concerned E-DCH MAC-d flow, the Node B shall include in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the E-DCH MAC-d flow being established.]
  - [FDD if the Node B does not establish a transport bearer for the concerned E-DCH MAC-d flow, the Node B shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK ADDITION RESPONSE message.]

## [TDD - HS-DSCH Setup]:

[TDD - If the HS-DSCH Information IE is present in the RADIO LINK ADDITION REQUEST message, then]:

- [TDD The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the HS-PDSCH RL ID IE.]
- [TDD The Node B shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].]
- [TDD The Node B shall include in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every HS-DSCH MAC-d flow being established.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *HS-DSCH Information* IE for an HS-DSCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow. If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the *DL RLC PDU Size Format* IE may be used by the Node B to determine the allocated capacity on user plane as described in [24].]
- [TDD The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK ADDITION REQUEST message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer received in RADIO LINK ADDITION REQUEST in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.]

- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the *TSN-Length* IE is included in the *HS-DSCH TDD Information* IE, then the IE is used to indicate the TSN bits applied to the MAC-hs PDU frame.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *Number of Supported Carriers* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information to allocate HSDPA resources over multiple carriers for the UE.]
- [1.28Mcps TDD For a multi-frequency cell, if the RADIO LINK ADDITION REQUEST message includes the *Multi-carrier HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information together with the *HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE to allocate HSDPA resources over multiple carriers for the UE.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH over multiple carriers and include the *HS-SCCH Specific Information Response LCR per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B shall include the *HARQ Memory Partitioning per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to apply HSDPA resources distributed over multiple carriers, the Node B may indicate the number of carriers actually used by the UE and include the *Multi-Carrier number* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B may include the *UsedFrequency* IE in the *HS-SCCH Specific Information Response LCR* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B may include the *UARFCN* IE in the *HS-SCCH Specific Information Response LCR per UARFCN* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [1.28 Mcps TDD If the MIMO Activation Indicator IE is included in the HS-DSCH TDD Information IE, then, the Node B shall activate the MIMO mode for the HS-DSCH Radio Link , decide the SF mode for HS-PDSCH dual stream and include the MIMO SF Mode for HS-PDSCH dual stream IE in the HS-DSCH TDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]

## [TDD - Intra-Node B Serving HS-DSCH Radio Link Change]:

[TDD - If the RADIO LINK ADDITION REQUEST message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link]:

- [TDD The Node B may include the *HARQ Memory Partitioning* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]

## [TDD - E-DCH]:

[TDD - If the [3.84Mcps TDD - *E-DCH Information* IE][1.28Mcps TDD - *E-DCH Information* 1.28Mcps IE] [7.68Mcps TDD - *E-DCH Information* 7.68Mcps IE] is present in the RADIO LINK ADDITION REQUEST message:]

- [TDD - The Node B shall setup the requested E-DCH resources on the Radio Link indicated by the *E-DCH Serving RL* IE.]

- [TDD If the *TNL QoS* IE is included in the *E-DCH MAC-d Flows Information TDD* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *E-DCH MAC-d Flows Information TDD* IE for an E-DCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flows Information TDD* IE, the Node B shall use this information for the related resource allocation operation.]
- [TDD If in the RADIO LINK ADDITION REQUEST message the *E-DCH Grant Type* IE in the *E-DCH MAC-d Flows Information TDD* IE is set to "Non-scheduled" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants are configured for that E-DCH MAC-d flow and shall use the information within the [3.84Mcps TDD *E-DCH Non-scheduled Grant Information TDD* IE] [1.28Mcps TDD *E-DCH Non-scheduled Grant Information LCR TDD* IE] [7.68Mcps TDD *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE], if included, for the related resource allocation operation.]
- [TDD If in the RADIO LINK ADDITION REQUEST message the *E-DCH Grant Type* IE in the *E-DCH MAC-d Flows Information TDD* IE is set to "Scheduled" the Node B shall assume that it may issue scheduled grants for the concerned E-DCH MAC-d flow.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows Information TDD* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions for the related queue.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-es Maximum Bit Rate LCR* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows Information TDD* IE, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]
- [3.84Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH TDD Maximum Bitrate* IE in the *E-DCH TDD Information* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the E-DCH Physical Layer
   Category LCR IE or Extended E-DCH Physical Layer Category LCR IE in the E-DCH TDD Information LCR IE
   for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when
   applicable, for E-DCH scheduling.]
- [7.68Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH TDD Maximum Bitrate* 7.68Mcps IE in the *E-DCH TDD Information* 7.68Mcps IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Processing Overload Level* IE in the [3.84Mcps TDD *E-DCH TDD Information* IE] [7.68Mcps TDD *E-DCH TDD Information 7.68Mcps* IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE], then if the Node B could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE in the [3.84Mcps TDD *E-DCH TDD Information* IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] [7.68Mcps TDD *E-DCH TDD Information* 7.68Mcps IE], then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]

- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum Number of Retransmission for Scheduling Info LCR* IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE in the *E-DCH TDD Information LCR* IE, then the Node B shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]
- [TDD The Node B shall allocate an E-RNTI identifier and include the E-RNTI identifier and the E-AGCH(s) assigned in the *E-DCH Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

## [TDD - Intra-Node B Serving E-DCH Radio Link Change]:

[TDD - If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Serving RL* IE, this indicates the new Serving E-DCH Radio Link]:

 [TDD - The Node B shall allocate E-AGCH parameters [1.28Mcps TDD - E-HICH parameters] corresponding to the E-DCH and include the E-AGCH Specific Information Response TDD IE, [1.28Mcps TDD - E-HICH Specific Information Response 1.28Mcps TDD IE] in the E-DCH Information Response IE in the RADIO LINK ADDITION RESPONSE message.]

## [1.28 Mcps TDD - Continuous Packet Connectivity Handling]:

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Continuous Packet Connectivity DRX Information LCR* IE, then the Node B shall take account into these parameters to decide the DRX operation related parameters and configure the concerned Node B Communication Context for DRX operation according to [21] and include the parameter(s) in the *Continuous Packet Connectivity DRX Information Response LCR* IE in the RADIO LINK ADDITION RESPONSE message.]

[1.28 Mcps TDD - If the *Inactivity Threshold for UE DRX Cycle Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the NodeB may use this value to determine the Inactivity Threshold for UE DRX Cycle according to [21].]

[1.28 Mcps TDD - If the *Enabling Delay Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the Node B may use this value to determine the beginning of uplink transmission in the new configuration according to [21].]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then:]

- [1.28 Mcps TDD The Node B shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for HS-DSCH Semi-Persistent scheduling operation according to [21].]
- [1.28 Mcps TDD The Node B shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28 Mcps TDD If the *HS-DSCH Semi-Persistent Resource Reservation Indicator* IE is included in the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then the Node B shall include *Allcoated HS-PDSCH Semi-persistent resource* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28 Mcps TDD The Node B shall include the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD The Node B shall include the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK SETUP RESPONSE message.]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the  $\emph{E-DCH Semi-Persistent scheduling Information LCR}$  [E, then:]

- [1.28 Mcps TDD The Node B shall configure the Serving E-DCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to [21].]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the Node B shall include *Allcoated E-DCH Semi-persistent resource* IE in the RADIO LINK ADDITON RESPONSE message.]

## **Response Message:**

If all requested RLs are successfully added, the Node B shall respond with a RADIO LINK ADDITION RESPONSE message.

After sending the RADIO LINK ADDITION RESPONSE message, the Node B shall continuously attempt to obtain UL synchronisation on the Uu interface.

For each RL for which the *Delayed Activation* IE is not included in the RADIO LINK ADDITION REQUEST message, the Node B shall:

- [FDD start transmission on the DL DPDCH(s) of the new RL as specified in [16].]
- [TDD start transmission on the new RL immediately as specified in [16].]

For each RL for which the *Delayed Activation* IE is included in the RADIO LINK ADDITION REQUEST message, the Node B shall:

- if the *Delayed Activation* IE indicates "Separate Indication":
  - not start any DL transmission for the concerned RL on the Uu interface;
- if the *Delayed Activation* IE indicates "CFN":
  - [FDD start transmission on the DL DPDCH(s) of the new RL as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
  - [TDD start transmission on the new RL at the CFN indicated in the Activation CFN IE as specified in [16].]

## 8.3.1.3 Unsuccessful Operation

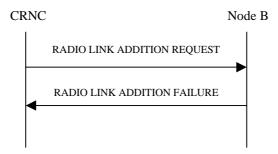


Figure 29: Radio Link Addition procedure: Unsuccessful Operation

If the establishment of at least one radio link is unsuccessful, the Node B shall respond with a RADIO LINK ADDITION FAILURE message. The message contains the failure cause in the *Cause* IE.

[FDD - If some RL(s) were established successfully, the Node B shall indicate this in the RADIO LINK ADDITION FAILURE message in the same way as in the RADIO LINK ADDITION RESPONSE message.]

[FDD - If the RADIO LINK ADDITION REQUEST contains a *C-ID* IE indicating that a Radio Link must be established on a Cell where DPC Mode change is not supported and DPC Mode can be changed for the relevant Node B Communication Context, the Node B shall consider the procedure as failed for the concerned Radio Link and shall respond with a RADIO LINK ADDITION FAILURE with the appropriate cause value ("DPC Mode change not supported").]

[FDD - If the requested Serving HS-DSCH Radio Link Change was successful, or if the addition of the requested serving HS-DSCH Radio Link was successful or existed already but the Serving HS-DSCH Radio Link change was unsuccessful, the Node B shall indicate this in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION FAILURE message.]

[FDD - If the requested secondary serving HS-DSCH Radio Link Change was successful, or if the addition of the requested secondary serving HS-DSCH Radio Link was successful or existed already but the secondary serving HS-DSCH Radio Link change was unsucessful, the Node B shall indicate this in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION FAILURE message.]

[FDD - If the requested Serving E-DCH Radio Link Change was successful, or if the addition of the requested serving E-DCH Radio Link was successful or existed already but the Serving E-DCH Radio Link change was unsuccessful, the Node B shall indicate this in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION FAILURE message.]

Typical cause values are as follows:

## Radio Network Layer Cause

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- UL SF not supported
- DL SF not supported
- Reconfiguration CFN not elapsed
- CM not supported
- [FDD DPC Mode change not supported]
- Delayed Activation not supported
- [FDD Continuous Packet Connectivity DTX-DRX operation not available]
- [FDD Continuous Packet Connectivity UE DTX Cycle not available]
- [FDD MIMO not available]
- [FDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD Multi Cell operation not available.]
- [1.28Mcps TDD- MIMO not available]
- [1.28Mcps TDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD TX diversity for MIMO UE on DL Control Channels not available]
- [FDD Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available]

## **Transport Layer Cause**

- Transport Resources Unavailable

#### **Miscellaneous Cause**

- O&M Intervention
- Control processing overload
- HW failure

## 8.3.1.4 Abnormal conditions

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *Compressed Mode Deactivation Flag* IE with the value "Deactivate" when compressed mode is active for the existing RL(s), and at least one of the new RL is added in a cell that has the same UARFCN (both UL and DL) of at least one cell with an already existing RL, the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Invalid CM settings".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Individual" in the existing RL(s) and if the *DL Reference Power* IEs are included in the *RL Information* 

IE but the *DL Reference Power* IE is not present for each RL in the *RL Information* IE, the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power* IEs in the *RL Information* IE but the power balancing is not active in the existing RL(s) or the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s), the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE or *RL Specific E-DCH Information* IE included in the *RL Information* IE for a specific RL [FDD - and the E-DCH RL is already configured in the Node B] and the *Diversity Control Field* IE is set to "Must", the Node B shall regard the Radio Link Addition procedure as failed and respond with the RADIO LINK ADDITION FAILURE message.

If ALCAP is not used, if the RADIO LINK ADDITION REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "May", the Node B shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.

If ALCAP is not used, if the RADIO LINK ADDITION REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "Must Not", the Node B shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.

If ALCAP is not used, if the RADIO LINK ADDITION REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE in [FDD - the *RL Specific E-DCH Information* IE in the *RL Information* IE for the first E-DCH RL][TDD – the *E-DCH MAC-d Flows Information TDD* IE], the Node B shall reject the Radio Link Addition procedure and respond with the RADIO LINK SETUP FAILURE message.

If ALCAP is not used, if the RADIO LINK ADDITION REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE for an HS-DSCH MAC-d Flow in the *HS-DSCH MAC-d Flows Information* IE, the Node B shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.

If the RADIO LINK ADDITION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

[1.28Mcps TDD - For a multi-frequency cell, if the RADIO LINK ADDITION REQUEST message does not include the *UARFCN* IE, the Node B shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.]

[1.28Mcps TDD - For a single frequency cell, if the RADIO LINK ADDITION REQUEST message includes the *UARFCN* IE, the Node B shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.]

[FDD - If the concerned NodeB Communication Context is configured to use DPCH in downlink and if a transmission gap pattern sequence is active with an SF/2 downlink compressed mode method and the RADIO LINK ADDITION REQUEST message does not contain the transmission gap pattern sequence code information for any new radio link, the NodeB shall reject the Radio Link Addition procedure using the RADIO LINK ADDITION FAILURE message with the cause value "Invalid CM Settings".]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH Serving Cell Change Information* IE but not the *HS-DSCH FDD Information* IE and the Node B Communication Context is not configured for HS-DSCH, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Serving E-DCH RL* IE but the Node B Communication Context is not configured for E-DCH, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Serving Cell Change CFN* IE but neither the *Serving E-DCH RL* IE nor *HS-DSCH Serving Cell Change Information* IE is included into, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the *E-DCH FDD Information* IE is present in the RADIO LINK ADDITION REQUEST message, but the *E-DPCH Information* IE is not present, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *E-DCH RL Indication* IE set to "E-DCH", but no *E-DCH FDD Information* IE, and the Node B Communication Context is not configured for E-DCH, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *E-DCH FDD Information* IE but no *E-DCH RL Indication* IE set to "E-DCH", then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD - If the RADIO LINK ADDITION REQUEST message includes the *HS-PDSCH RL-ID* IE not equal to the *RL ID* IE, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD - If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Serving RL* IE not equal to the *RL ID* IE, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD - If the RADIO LINK ADDITION REQUEST message contains the *HS-DSCH Information* IE and if the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Serving Cell Change Information*] and the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Serving Cell Change Information*] has the value "Indexed MAC-d PDU Size", the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

If the RADIO LINK ADDITION REQUEST message does not include the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Serving Cell Change Information*] and the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Serving Cell Change Information*] has the value "Flexible MAC-d PDU Size", the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

[FDD - If the RADIO LINK ADDITION REQUEST message contains, for at least one logical channel, the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE and there exist a logical channel for which the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE is not present, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD - If the RADIO LINK ADDITION REQUEST message contains, for at least one logical channel, the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH Information* IE, and there exist a logical channel for which the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH Information* IE is not present, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD - If the RADIO LINK ADDITION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for HS-DSCH MAC-d flow being added, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD - If the RADIO LINK ADDITION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for E-DCH MAC-d flow being added, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

If the RADIO LINK ADDITION REQUEST message contains the *HS-PDSCH RL ID* IE [FDD - in the *HS-DSCH Serving Cell Change Information* IE] and/or *Serving E-DCH RL* IE and if both HS-DSCH and E-DCH are configured in the Node B but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not in the same cell then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

[FDD - If the RADIO LINK ADDITION REQUEST message contains the HS-DSCH Serving Cell Change Information IE and the E-DPCH Information IE which includes the HS-DSCH Configured Indicator IE set as 'HS-DSCH not configured' then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *Transport Bearer Not Requested Indicator* IE for a DCH but the DCH is configured to be included as a part of the downlink CCTrCH, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains the MIMO Activation Indicator IE, Sixtyfour QAM Usage Allowed Indicator IE set to "Allowed" and/or the Additional HS Cell Information RL Addition IE, but does not contain the HS-DSCH MAC-d PDU Size Format IE set to "Flexible MAC-d PDU Size", then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Serving E-DCH RL ID* IE but contains the *Transport Bearer Not Requested Indicator* IE or there is at least one E-DCH MAC-d flow which transport bearer was not configured in the Node B, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH for a specific RL and the specific RL is combined with the existing RL which the transport bearer is established for the DCH in Node B, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains a *MIMO Activation Indicator* IE and an *Additional HS Cell Information RL Addition* IE, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *Additional HS Cell Information RL Addition* IE and if the HS-DSCH is not configured in the NodeB Communication Context and the *HS-DSCH Information* IE is not present, then the NodeB shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

If the RADIO LINK ADDITION REQUEST message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Serving Cell Change Information* IE] set to 'Flexible RLC PDU Size', *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Serving Cell Change Information* IE] has the value "Indexed MAC-d PDU Size", the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

If the RADIO LINK ADDITION REQUEST message does not include the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Serving Cell Change Information* IE] and the *DL RLC PDU Size Format* IE in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Serving Cell Change Information* IE] has the value "Flexible RLC PDU Size", the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *Diversity Mode* IE in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Addition* IE and the secondary serving HS-DSCH is already configured in the Node B Communication Context, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the secondary serving HS-DSCH is not configured in the Node B Communication Context and if the RADIO LINK ADDITION REQUEST message contains in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Addition* IE the *Diversity Mode* IE not set to "None" but not the *Transmit Diversity Indicator* or contains the *Transmit Diversity Indicator* but not the *Diversity Mode* IE not set to "None", then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

## 8.3.2 Synchronised Radio Link Reconfiguration Preparation

#### 8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one Node B Communication Context.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

## 8.3.2.2 Successful Operation

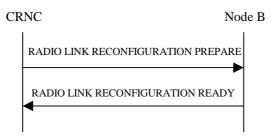


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

#### **DCH Modification:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs To Modify* IE then the Node B shall treat them each as follows:

- If the *DCHs To Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *TNL QoS* IE for a DCH or a set of co-ordinated DCHs to be modified and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply in the uplink for the related DCH or set of co-ordinated DCHs.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *Allocation/Retention Priority* IE for a DCH, the Node B shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs, the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH indicator* IE set to "Uplink DCH only", the Node BNode B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.]
- [FDD If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH indicator* IE set to "Downlink DCH only", the Node BNode B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of coordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

#### **DCH Addition:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs To Add* IEs then the Node B shall treat them each as follows:

- If the *DCHs To Add* IE includes multiple *DCH Specific Info* IEs, the Node B shall treat the DCHs in the *DCHs*To Add IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.
- [FDD For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply for the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Startpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- [TDD The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

#### **DCH Deletion:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs To Delete* IE, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

## **Physical Channel Modification:**

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCHs* IE (if it is included) in the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPCCH Slot Format* IE, the Node B shall set the new Uplink DPCCH Structure to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPDCH Indicator For E-DCH Operation* IE and it is set to "UL DPDCH not present", the UL DPDCH resources shall be removed from the configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DL DPCH Information* IE and the concerned Node B Communication Context is configured to use F-DPCH in the downlink in the old configuration, the Node B shall configure the concerned Node B Communication Context to use DPCH in the downlink in the new configuration.]

- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DL DPCH Power Information* IE, the Node B shall use the information contained in it for the power settings of the DL DPCH. In particular, if the received *Inner Loop DL PC Status* IE is set to "Active", the Node B shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the Node B shall deactivate the inner loop DL power control for all RLs according to ref. [10].]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a DL DPCH Information IE, the Node B shall apply the parameters to the new configuration as follows:]

- [FDD The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *DL DPCH Slot Format* IE, the Node B shall set the new Downlink DPCH Structure to the new configuration.]

- [FDD If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *F-DPCH Information* IE, the Node B shall configure the concerned Node B Communication Context to use F-DPCH in the downlink in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. Any Transmission Gap Pattern Sequences already existing in the previous Compressed Mode Configuration are replaced by the new sequences once the new Compressed Mode Configuration has been activated or once the previous Compressed Mode Configuration has been deactivated. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DTX-DRX Information* IE, then:]

- [FDD The Node B shall configure the concerned Node B Communication Context for DTX operation according to [10].]
- [FDD If *DRX Information* IE is included in the *Continuous Packet Connectivity DTX-DRX Information* IE, then the Node B shall configure the concerned Node B Communication Context for DRX operation according to [10].]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then:]

- [FDD If the *UE DTX DRX Offset* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall apply the indicated Offset in *UE DTX DRX Cycle* IE in the new configuration.]
- [FDD If the *Enabling Delay* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this value to determine the beginning of uplink transmission in the new configuration according to [10].]
- [FDD If the *DTX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this information to modify the indicated DTX Information parameter in the new configuration. If the choice of *DTX Information To Modify* IE is "Deactivate", then DRX should be deactived together with DTX.]
- [FDD If the *DRX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this information to modify the indicated DRX Information in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity HS-SCCH less Information* IE, then:]

- [FDD The Node B shall configure the Serving HS-DSCH Radio Link for Continuous Packet Connectivity HS-SCCH less operation in the new configuration according to [10].]
- [FDD The Node B shall allocate the HS-PDSCH codes needed for HS-SCCH less operation and include the
   Continuous Packet Connectivity HS-SCCH less Information Response IE in the RADIO LINK
   RECONFIGURATION READY message.]
- [FDD If at least one of HS-PDSCH Second Code Support IE is set to "True", then the Node B shall include HS-PDSCH Second Code Index IE in the RADIO LINK RECONFIGURATION READY message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE, then the Node B shall deactivate the Continuous Packet Connectivity HS-SCCH less operation for the HS-DSCH Radio Link.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DRX Information LCR* IE, then the Node B shall take account into these parameters to decide the DRX operation related parameters and configure the concerned Node B Communication Context for DRX operation according to [21] and include the parameter(s) in the *Continuous Packet Connectivity DRX Information Response LCR* IE in the RADIO LINK RECONFIGURATION READY message.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then:]

- [1.28 Mcps TDD If the *UE DTX DRX Offset* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the Node B shall apply the indicated Offset in *UE DTX DRX Cycle* IE in the new configuration.]
- [1.28 Mcps TDD If the *Enabling Delay* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the Node B shall use this value to determine the beginning of uplink transmission in the new configuration according to [21].]
- [1.28 Mcps TDD If the *DRX Information To Modify* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the Node B shall use this information to modify the indicated DRX Information in the new configuration.]
- [1.28 Mcps TDD If the *Inactivity Threshold for UE DRX Cycle Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the NodeB may use this value to determine the Inactivity Threshold for UE DRX Cycle according to [21].]
- [1.28 Mcps TDD If the *Enabling Delay Ext* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the Node B may use this value to determine the beginning of uplink transmission in the new configuration according to [21].]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then:]

- [1.28 Mcps TDD The Node B shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for HS-DSCH Semi-Persistent scheduling operation according to [21].]
- [1.28 Mcps TDD The Node B shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28 Mcps TDD If the HS-DSCH Semi-Persistent Resource Reservation Indicator IE is included in the HS-DSCH Semi-Persistent scheduling Information LCR IE, then the Node B shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK RECONFIGURATION READY message.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Semi-Persistent scheduling Information LCR* IE, then:]

- [1.28 Mcps TDD The Node B shall configure the Serving E-DCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to [21].]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the Node B shall include Allcoated E-DCH Semi-persistent resource IE in the RADIO LINK RECONFIGURATION READY message.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, then:]

- [1.28 Mcps TDD - If the *Transport Block Size List* IE or/and *Repetition Period list* IE is/are included in the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, the Node B shall modify the configuration of Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for HS-DSCH Semi-Persistent scheduling operation according to [21].

- [1.28 Mcps TDD If the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE is included in the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, the Node B shall use this information to modify the buffer size for HS-DSCH Semi-Persistent scheduling operation.
- [1.28 Mcps TDD If the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE is included in the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, the Node B shall use this information to allocate the number of processes for HS-DSCH Semi-Persistent scheduling operation.
- [1.28 Mcps TDD The Node B shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28 Mcps TDD If the HS-DSCH Semi-Persistent Resource Reservation Indicator IE is included in the HS-DSCH Semi-Persistent scheduling Information to modify LCR IE, then the Node B shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK RECONFIGURATION READY message.]
  - [1.28 Mcps TDD If the *HS-DSCH Semi-Persistent scheduling operation Indicator* IE is included in the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, then the Node B shall apply this information for HS-DSCH Semi-Persistent scheduling operation.]
- [1.28 Mcps TDD If the buffer size for HS-DSCH Semi-Persistent scheduling needs to be modified, then the Node B shall include the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28 Mcps TDD If the number of processes for HS-DSCH Semi-Persistent scheduling needs to be modified, then the Node B shall include the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28 Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Semi- Persistent scheduling Information to modify LCR* IE, then:]
  - [1.28 Mcps TDD If the *Repetition Period list* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, the Node B shall modify the configuration of Serving E-DCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to [21].
    - [1.28 Mcps TDD If the *E-DCH Semi-Persistent scheduling Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, then the Node B shall apply this information for E-DCH Semi-Persistent scheduling operation.]
  - [1.28 Mcps TDD If the Semi-Persistent E-DCH releted E-HICH Information IE is included in the E-DCH Semi-Persistent scheduling Information to modify LCR IE, then the Node B shall use this information to modify the configuration of Semi-Persistent E-DCH releted E-HICH.]
  - [1.28 Mcps TDD If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, then the Node B shall include *Allcoated E-DCH Semi-persistent resource* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28 Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR* IE, then the Node B shall deactivate the HS-DSCH Semi-Persistent scheduling operation for the HS-DSCH Radio Link.]
- [1.28 Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Semi-Persistent scheduling Deactivate Indicator LCR* IE, then the Node B shall deactivate the E-DCH Semi-Persistent scheduling operation for the E-DCH Radio Link.]

## [FDD - E-DPCH Handling]:

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DPCH Information* IE, the Node B shall apply the parameters to the new configuration as follows:]
  - [FDD If the *E-DPCH Information* IE includes the *Maximum Set of E-DPDCHs* IE, the Node B shall apply the contents of the Maximum Set in the new configuration.]
  - [FDD If the *E-DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration]

- [FDD If the *E-DPCH Information* IE includes the *E-TFCS Information* IE, the Node B shall use the *E-TFCS Information* IE for the E-DCH when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the uplink of the new configuration. If the *E-TFCS Information* IE contains the *E-DCH Minimum Set E-TFCI* IE the Node B shall use the value for the related resource allocation operation.]
- [FDD If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DPDCH Power Interpolation* IE, the Node B shall use the value to determine the applicable E-DPDCH power formula defined in [10]. If the *E-DPDCH Power Interpolation* IE is not present, the Node B shall use the E-DPDCH power extrapolation formula defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION PREPARE message.]
- [FDD If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the Node B shall use the information according to [10]. If the *E-TFCI Boost Information* IE is not present, the Node B shall use the E-TFCI BetaEC Boost value "127" in the algorithm defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION PREPARE message.]
- [FDD If the *E-DPCH Information* IE includes the *E-TTI* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-DPCCH Power Offset* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-RGCH 2-Index-Step* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-RGCH 3-Index-Step* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *HARQ Info for E-DCH* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *HS-DSCH Configured Indicator* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *Minimum Reduced E-DPDCH Gain Factor* IE , then the Node B shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the Node B Communication Context, the Node B may use the default value defined in [18].]

#### [TDD - UL/DL CCTrCH Modification]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IE, then the Node B shall treat them each as follows:]

- [TDD If the IE includes any of the *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]
- [TDD If the IE includes any *UL DPCH To Add* IE, *UL DPCH To Add LCR* IE, *UL DPCH To Add 7.68Mcps* IE, *DL DPCH To Add 1E*, the Node B shall include this DPCH in the new configuration.]
- [TDD If the IE includes any *UL DPCH To Delete* IE or *DL DPCH To Delete* IE, the Node B shall remove this DPCH in the new configuration.]
- [TDD If the IE includes any *UL DPCH To Modify* IE or *DL DPCH To Modify* IE and includes any of the *Repetition Period* IE, *Repetition Length* IE or *TDD DPCH Offset* IE, or the message includes UL/DL Timeslot Information and includes any of the [3.84Mcps TDD *Midamble Shift And Burst Type* IE], [1.28Mcps TDD *Midamble Shift LCR* IE], [7.68Mcps TDD *Midamble Shift And Burst Type* 7.68Mcps IE], or *TFCI Presence* IE or the message includes UL/DL Code information and includes [3.84Mcps TDD *TDD Channelisation Code* IE], [1.28Mcps TDD *TDD Channelisation Code* 1E], [1.28Mcps TDD *TDD UL DPCH Time Slot Format LCR* IE], the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]

- [1.28Mcps TDD If the *UL CCTrCH To Modify* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control according [19] and [21] when the new configuration is being used.]
- [1.28Mcps TDD If the *UL CCTrCH to Modify* IE includes the *TDD TPC UL Step Size* IE, the Node B shall apply this value to the uplink TPC step size in the new configuration.]
- [TDD If the *DL CCTrCH to Modify* IE includes the *TDD TPC DL Step Size* IE, the Node B shall apply this value to the downlink TPC step size in the new configuration.]
- [1.28Mcps TDD If the *DL DPCH To Modify Per RL* IE includes the *TDD TPC DL Step Size* IE and the *RL ID* IE in the *DL DPCH To Modify Per RL* IE is same as the *HS-PDSCH RL ID* IE, the Node B shall apply this value to the HS-SCCH TPC step size in the new configuration.]
- [1.28Mcps TDD If the *UL Timeslot Information LCR* IE includes the *PLCCH Information* IE, the Node B shall delete / add / modify the PLCCH assignment according to the content when the new configuration is used.]

## [TDD - UL/DL CCTrCH Addition]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH To Add* IE or *DL CCTrCH To Add* IE, the Node B shall include this CCTrCH in the new configuration.]

[TDD - If the *UL/DL CCTrCH To Add* IE includes any [3.84Mcps TDD - *UL/DL DPCH Information* IE] [1.28Mcps TDD - *UL/DL DPCH Information LCR* IE] [7.68Mcps TDD - *TDD Channelisation Code 7.68Mcps* IE], the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes *TDD TPC DL Step Size* IE within a *DL CCTrCH To Add* IE, the Node B shall set the downlink TPC step size of that CCTrCH to that value, otherwise the Node B shall set the TPC step size of that CCTrCH to the same value as the lowest numbered DL CCTrCH in the current configuration.]

[1.28Mcps TDD - If the *UL CCTrCH To Add* IE includes the *TDD TPC UL Step Size* IE, the Node B shall apply the uplink TPC step size in the new configuration.]

[1.28Mcps TDD - The Node B shall use the *UL SIR Target* IE in the *UL CCTrCH To Add* IE as the UL SIR value for the inner loop power control for this CCTrCH according [19] and [21] in the new configuration.]

[1.28Mcps TDD - If the *DL DPCH To Add Per RL* IE includes the *TDD TPC DL Step Size* IE and the *RL ID* IE in the *DL DPCH To Add Per RL* IE is same as the *HS-PDSCH RL ID* IE, the Node B shall apply this value to the HS-SCCH TPC step size in the new configuration. If no *TDD TPC DL Step Size* IE is included in the *DL DPCH To Add Per RL* IE, the value of *HS-SCCH TPC Step Size* IE should applied to the HS-SCCH TPC step size in the new configuration.]

[1.28Mcps TDD - If the *UL Timeslot Information LCR* IE includes the *PLCCH Information* IE, the Node B shall add the PLCCH assignment when the new configuration is used.]

## [TDD - UL/DL CCTrCH Deletion]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCTrCH to be deleted , the Node B shall remove this CCTrCH in the new configuration.]

## **DL Power Control:**

- [FDD - If the *RL Information* IE includes the *DL Reference Power* IEs and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported, when the new configuration has been activated, according to subclause 8.3.7, using the *DL Reference Power* IE. If the CFN modulo the value of the *Adjustment Period* IE is not equal to 0, the power balancing continues with the old reference power until the end of the current adjustment period, and the updated reference power shall be used from the next adjustment period.]

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION READY message.]

## [TDD - DSCH Addition/Modification/Deletion]:

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Add*, *DSCH To Modify* or *DSCH To Delete* IE, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]

[TDD - The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *TNL QoS* IE in the *DSCH TDD Information* IE and if ALCAP is not used, the Node B may use the *TNL QoS* IE to determine the transport bearer characteristics to apply in the uplink for the related DSCH.]

#### [TDD - USCH Addition/Modification/Deletion]:

- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified, if the *TNL QoS* IE is included and if ALCAP is not used, the Node B may use the *TNL QoS* IE to determine the transport bearer characteristics to apply between the Node B and the CRNC for the related USCHs.]
- [TDD The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each USCH.]

#### **RL Information:**

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *pth* to "*PhCH number p*".]
- [FDD If the *RL Information* IE includes a *DL Code Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- [FDD If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. During compressed mode, the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [3.84 Mcps TDD and 7.68Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum CCTrCH DL power for the DCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the maximum CCTrCH DL power, otherwise the maximum CCTrCH DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. If no *Maximum Downlink Power* IE is included (even if *CCTrCH Maximum DL Transmission Power* IEs are included), any maximum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]
- [3.84 Mcps TDD and 7.68Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the minimum CCTrCH DL power for the DCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the minimum CCTrCH DL power, otherwise the minimum CCTrCH DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. If no *Minimum Downlink Power* IE is included (even if *CCTrCH Minimum DL Transmission Power* IEs are included), any minimum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]

- [3.84 Mcps TDD and 7.68Mcps TDD If the *DL CCTrCH To Modify* IE is included and *Maximum CCTrCH DL Power to Modify* IE and/or *Minimum CCTrCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DCH type CCTrCH. If the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values for all other DCH type CCTrCHs of the radio link.]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Maximum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL DPCH. If no *Maximum Downlink Power* IE is included, any maximum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Minimum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL DPCH. If no *Minimum Downlink Power* IE is included, any minimum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Modify* IE is included and *Maximum DL Power to Modify LCR* IE and/or *Minimum DL Power to Modify LCR* IE are included, the Node B shall apply the values in the new configuration for this timeslot, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [3.84Mcps TDD and 7.68Mcps TDD If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the determined initial CCTrCH DL power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCHs when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4).]
- [3.84Mcps TDD and 7.68Mcps TDD The initial power, maximum power, and minimum power for a DSCH type CCTrCH to be added or modified, shall be determined as follows:
  - If the DSCH type CCTrCH is paired with an uplink CCTrCH(s) for inner loop power control, the minimum, maximum and initial power for each PDSCH is determined in the same way as described above for DCH type CCTrCHs.
  - If the DSCH type CCTrCH is not paired with an uplink CCTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCTrCHs. The minimum and initial powers, however, are subject to control by the CRNC via the frame protocol].
- [1.28 Mcps TDD If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot in a DCH type CCTrCH by the following rule: If the *Initial DL Transmission Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the initial DL power, otherwise the initial DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing timeslots for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]

- [1.28Mcps TDD If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot within the DSCH type CCTrCH by the following rule: If both the *CCTrCH Initial DL Transmission Power* IE and the *DL Time Slot ISCP Info LCR* IE are included then the Node B shall use that power for the PDSCH power, otherwise the PDSCH power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. If *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall apply the given power to the transmission on each PDSCH and on each timeslot of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing RL/timeslots when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL PDSCH. If no *Maximum Downlink Power* IE is included, any maximum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL PDSCH. If no *Minimum Downlink Power* IE is included, any minimum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Modify* IE is included and the *Maximum CCTrCH DL Power to Modify* IE and/or the *Minimum CCTrCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DSCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [FDD If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the Node B shall adjust the timing of the radio link accordingly in the new configuration.]
- [1.28Mcps TDD If the *RL Information* IE message contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]
- [FDD If the *RL Information* IE includes the *F-DPCH Slot Format* IE and if the Node B Communication Context is configured to use F-DPCH in the downlink, then the Node B shall use this information to configure the F-DPCH slot format of each RL according to [7].]

#### [TDD - PDSCH RL ID]:

- [TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *PDSCH RL ID* IE then in the new configuration the Node B shall use the PDSCH and/or PUSCH in this radio link.]

## Signalling bearer rearrangement:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Signalling Bearer Request Indicator* IE the Node B shall allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION READY message.

## **HS-DSCH Setup:**

If the HS-DSCH Information IE is present in the RADIO LINK RECONFIGURATION PREPARE message, then:

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message. [FDD The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.] [1.28Mcps TDD- The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The Node B shall include the HS-DSCH Initial Capacity Allocation IE in the [FDD HS-DSCH FDD Information Response IE] [TDD HS-DSCH TDD Information Response IE] in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK RECONFIGURATION PREPARE message includes HS-DSCH MAC-d PDU Size Format IE in the HS-DSCH Information IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the HS-DSCH Initial Capacity Allocation IE the values for the peer of Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE to the values of the corresponding peer received in RADIO LINK RECONFIGURATION PREPARE in the HS-DSCH MAC-d Flows Information IE in the HS-DSCH Information IE for a Priority Queue including Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SICH SIR Target* IE in the *HS-DSCH Information* IE, the Node B shall use this value to determine the HS-SICH SIR Target. The *HS-SICH SIR Target* IE indicates the received UL SIR target of HS-SICH NACK for this UE.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.
- [FDD If the MIMO Activation Indicator IE is included in the HS-DSCH FDD Information IE, then the Node B shall activate the MIMO mode for the HS-DSCH Radio Link and the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the MIMO N/M Ratio IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the HS-DSCH MAC-d PDU Size Format IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the HS-DSCH TB Size Table Indicator IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B may use:]
  - [FDD a different HS-SCCH in consecutive TTIs for this UE]
  - [FDD HS-SCCH orders for the case of HS-SCCH-less operation to this UE]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE the Node B may use the supported HSDPA functions for this UE.
- [1.28Mcps TDD For a multi-frequency cell, if the RADIO LINK RECONFIGURATION PREPARE message includes the *Number of Supported Carriers* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information to allocate HSDPA resources over multiple frequencies for UE.]
- [1.28Mcps TDD For a multi-frequency cell, if the RADIO LINK RECONFIGURATION PREPARE message includes the *Multi-carrier HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information together with the *HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE to allocate HSDPA resources over multiple carriers for the UE.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH over multiple frequencies and include the *HS-SCCH Specific Information Response LCR per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B shall include the *HARQ Memory Partitioning per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B may indicate the number of multiple frequencies actually used by the UE and include the *Multi-Carrier number* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

[1.28 Mcps TDD - If the *MIMO Activation Indicator* IE is included in the *HS-DSCH TDD Information* IE, then, the Node B shall activate the MIMO mode for the HS-DSCH Radio Link, decide the SF mode for HS-PDSCH dual stream and include the *MIMO SF Mode for HS-PDSCH dual stream* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- If the RADIO LINK RECONFIGURATION PREPARE message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the *DL RLC PDU Size Format* IE may be used by the Node B to determine the allocated capacity on user plane as described in [24].

#### [FDD – Secondary Serving HS-DSCH Setup:]

[FDD – If the *C-ID* IE is present in the *Additional HS Cell Information RL Reconf Prep* IE in the RADIO LINK RECONFIGURATION PREPARE message, then:]

- [FDD The Node B shall setup the requested HS-PDSCH resources on the secondary serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and include the *HS-SCCH Specific Secondary Serving Information Response* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE with value set to "not allowed", then the Node B shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the concerned Node B Communication Context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH Radio Link, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *Diversity Mode* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, the Node B shall apply cell specific transmit diversity configuration and if the *Diversity Mode* IE is not set to "None" the Node B shall activate/deactivate the Transmit Diversity for the secondary serving HS-DSCH Radio Link in accordance with the *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information* IE.]

## Intra-Node B Serving HS-DSCH Radio Link Change:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- In the new configuration the Node B shall de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link and allocate the HS-PDSCH resources for the new Serving HS-PDSCH Radio Link.
- The Node B may include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message. [FDD The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.] [1.28Mcps TDD- The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]

- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.
- If a reset of the MAC-hs is not required the Node B shall include the MAC-hs Reset Indicator IE in the RADIO LINK RECONFIGURATION READY message.
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify IE and the value is set to "allowed" or if HS-DSCH Information To Modify IE is not included and the Node B Communication Context is configured with Sixtyfour QAM allowed for the serving HS-DSCH Radio Link and not used in the current configuration and then if the Node B decides to use 64 QAM in the new configuration, then it shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

## [FDD - Intra-Node B Secondary Serving HS-DSCH Radio Link Change:]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *C-ID* IE and the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Reconf Prep* IE and the secondary serving HS-DSCH Radio Link has been configured in the Node B, then the *HS-PDSCH RL ID* IE indicates the new secondary serving HS-DSCH Radio Link:]

- [FDD In the new configuration the Node B shall de-allocate the HS-PDSCH resources of the old secondary serving HS-PDSCH Radio Link and allocate the HS-PDSCH resources for the new secondary serving HS-PDSCH Radio Link. The Node B shall remove the old secondary serving HS-PDSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the HS-SCCH Specific Secondary Serving Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE and the value is set to "allowed" or if HS-DSCH FDD Secondary Serving Information To Modify IE is not included and the Node B Communication Context is configured with Sixtyfour QAM allowed for the secondary serving HS-DSCH Radio Link and not used in the current configuration and then if the Node B decides to use 64 QAM for the new secondary serving HS-DSCH Radio Link, then it shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

## **HS-DSCH Modification:**

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify* IE, then:

The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE for every HS-DSCH MAC-d flow being modified for which the establishment of one or several new Priority Queues was requested, if the Node B allows the CRNC to start the transmission of MAC-d PDUs for the Priority Queue(s) being established before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK RECONFIGURATION PREPARE message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information To Modify* IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the

values of the corresponding peer received in RADIO LINK RECONFIGURATION PREPARE in the *HS-DSCH Information To Modify* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.

- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH Information To Modify* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH Information To Modify* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Window Size* IE or *T1* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated values in the new configuration for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the MAC-d PDU Size Index IE in the Modify Priority Queue choice, the Node B shall delete the previous list of MAC-d PDU Size Index values for the related HSDPA Priority Queue and use the MAC-d PDU Size Index values indicated in the MAC-d PDU Size Index IE in the new configuration.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *CQI Feedback Cycle k* IE, the *CQI Repetition Factor* IE, the *ACK-NACK Repetition Factor* IE, the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated CQI Feedback Cycle k value, the CQI Repetition Factor or the ACK-NACK Repetition Factor, ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To Modify* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes *Measurement Power Offset* IE in the *HS-DSCH Information* IE or the *HS-DSCH Information To Modify* IE, then the Node B shall use the measurement power offset as described in [10] subclause 6A.2.]
- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use the indicated power offset in the new configuration.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the HS-SICH SIR
   Target IE in the HS-DSCH Information To Modify IE, the Node B shall use this value to the SIR Target in the
   new configuration. The HS-SICH SIR Target IE indicates the received UL SIR target of HS-SICH NACK for
   this UE.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the HS-SICH TPC step size IE in the HS-DSCH Information To Modify IE, the Node B shall use this value to the HS-SICH TPC step size in the new configuration.]
  - [1.28Mcps TDD For a multi-frequency cell, if the RADIO LINK RECONFIGURATION PREPARE message includes the *Multi-carrier HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use this information together with the *HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information To Modify* IE to allocate HSDPA resources over multiple carriers for the UE.]
- [FDD If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH codes corresponding to the HS-DSCH. The Node B shall then report the codes which are used in the new configuration specified in the *HS-SCCH Specific Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- [TDD If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH parameters corresponding to the HS-DSCH. The Node B shall then report the values for the parameters which are used in the new configuration specified in the [3.84Mcps TDD *HS-SCCH Specific Information Response*] [1.28Mcps TDD *HS-SCCH Specific Information Response LCR*] [7.68Mcps TDD *HS-SCCH Specific Information Response 7.68Mcps*] IEs in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the *HS-DSCH Information To Modify* IE includes the *HS-PDSCH Code Change Grant* IE, then the Node B may modify the HS-PDSCH codes corresponding to the HS-DSCH. The Node B shall then report the codes which are used in the new configuration specified in the *Continuous Packet Connectivity HS-SCCH less Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If the concerned Node B is not in Continuous Packet Connectivity HS-SCCH less mode, the RNC shall not include the *HS-PDSCH Code Change Grant* IE in the *HS-DSCH Information To Modify* IE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated HARQ Preamble Mode in the new configuration as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the Node B shall not include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d PDU Size* Format IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use, in the new configuration, the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Physical Layer Category* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use this information in the new configuration and may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION READY message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD If the MIMO Mode Indicator IE is included in the HS-DSCH Information To Modify IE, then the Node B shall activate/deactivate the MIMO mode for the HS-DSCH Radio Link in accordance with the MIMO Mode Indicator IE.]
- [FDD If the *MIMO Mode Indicator* IE is set to "Activate", then the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH Information To Modify* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD Any secondary serving HS-DSCH that was applied in the old configuration shall remain in the new configuration unless it is explicitly removed.]
- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]

- [1.28Mcps TDD For a multi-frequency cell, if the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, and the Node B allows UE to use HSDPA resources distributed over multiple frequencies, then the Node B may modify the HS-SCCH Codes corresponding to the HS-DSCH over multiple frequencies, the Node B shall then report the codes which are used in the new configuration specified in the *HS-SCCH Specific Information Response LCR per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28Mcps TDD- If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Physical Layer Category* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use this information in the new configuration and may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION READY message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [1.28Mcps TDD- If the *MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify* IE, then the Node B shall activate/deactivate the MIMO mode for the HS-DSCH Radio Link in accordance with the *MIMO Mode Indicator* IE.]
  - [1.28 Mcps TDD If the MIMO Mode Indicator IE is set to "Activate", then the Node B shall decide the SF mode for HS-PDSCH dual stream and include the MIMO SF Mode for HS-PDSCH dual stream IE in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes *DL RLC PDU Size Format* IE for a Priority Queue in the in the *HS-DSCH Information To Modify* IE, the *DL RLC PDU Size Format* IE may be used by the Node B to determine the allocated capacity on user plane as described in [24].
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Information To Modify* IE the Node B may use the supported HSDPA functions for this UE.

#### [FDD – Secondary Serving HS-DSCH Modification:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH FDD Secondary Serving Information To Modify* IE in the *Additional HS Cell Information RL Reconf Prep* IE, then:]

- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH FDD Secondary Serving Information To Modify* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes *Measurement Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE or the *HS-DSCH FDD Secondary Serving Information To Modify* IE, then the Node B shall use the measurement power offset as described in [10] subclause 6A.2.]
- [FDD If the HS-DSCH FDD Secondary Serving Information To Modify IE includes the HS-SCCH Code Change Grant IE, then the Node B may modify the secondary serving HS-SCCH codes corresponding to the HS-DSCH. The Node B shall then report the codes which are used in the new configuration specified in the HS-SCCH Specific Secondary Serving Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE with value set to "not allowed", then the Node B shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the concerned Node B Communication Context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH Radio Link, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]

- [FDD If the *Diversity Mode* IE is included, then:]
  - [FDD- the Node B shall apply cell specific transmit diversity configuration for the secondary serving HS-DSCH radio link according to *Diversity Mode* IE and *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information To Modify* IE]
  - [FDD If the *Diversity Mode* IE is not set to "None", the DRNS shall apply diversity for the secondary serving HS-DSCH radio link according to the value given in the *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information To Modify* IE.]
- [FDD If the *Non Cell Specific Tx Diversity* IE equals "Tx Diversity" is included, the Node B shall apply non cell specific transmit diversity configuration and reconfigure the transmit diversity setting for the secondary serving HS-DSCH radio link to the same value as defined for the serving HS-DSCH radio link in the new configuration.]

## [FDD – Secondary Serving HS-DSCH Removal:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Secondary Serving Remove* IE in the *Additional HS Cell Information RL Reconf Prep* IE, then the indicated secondary serving HS-DSCH Radio Link shall be removed.]

#### **HS-DSCH MAC-d Flow Addition/Deletion:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated HS-DSCH MAC-d flows. When an HS-DSCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH MAC-d Flows To Delete* IE requesting the deletion of all remaining HS-DSCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the HS-DSCH configuration from the Node B Communication Context and release the HS-PDSCH resources

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d Flows To Add* IE, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being added, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If Node B Communication Context is configured to use the "Flexible MAC-d PDU Size" format for the HS-DSCH, then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer received in RADIO LINK RECONFIGURATION PREPARE message in the *HS-DSCH MAC-d Flows To Add* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The Node B may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION READY message. [FDD The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]

- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B may include the *HARQ Memory Partitioning per UARFCN* IE in the RADIO LINK RECONFIGURATION READY message.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes *DL RLC PDU Size Format* IE for a Priority Queue in the in the *HS-DSCH MAC-d Flows To Add* IE, the *DL RLC PDU Size Format* IE may be used by the Node B to determine the allocated capacity on user plane as described in [24].

### [FDD – HS-DSCH Preconfiguration for Enhanced HS Serving Cell Change]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Preconfiguration Setup* IE in the *RL Information* IE the Node B shall if supported preconfigure the indicated cells for Enhanced HS Serving Cell Change according to [49]:

- [FDD The Node B shall preconfigure sets of HS-SCCH codes on the cells preconfigured for HS-DSCH, primary serving HS-DSCH cell, as well as on the secondary serving HS-DSCH cells. The primary serving HS-DSCH cell is designated through the *C-ID* IE part of the *RL Information* IE in the RADIO LINK RECONFIGURATION PREPARE message. The list of secondary serving HS-DSCH cells is designated by the list of *C-ID*s in the *HS-DSCH Preconfiguration Setup* IE part of the *RL Information* IE in the RADIO LINK RECONFIGURATION PREPARE message. ]
- [FDD The number of HS-SCCH codes to preconfigure for each cell may be optionally specified: ]
  - [FDD by the *Num Primary HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Setup* IE, for the primary serving HS-DSCH cell]
  - [FDD by the *Num Secondary HS-SCCH Codes* IE in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE for each of the secondary serving HS-DSCH cells]
- [FDD If *Num Primary HS-SCCH Codes* IE or *Num Secondary HS-SCCH Codes* IE is not included in the message, the number and distribution of codes on primary and any secondary cells shall be preconfigured to satisfy any limitations in [10].
- [FDD The Node B shall return these codes in the *Sets of HS-SCCH Codes IE in the HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE of the RADIO LINK RECONFIGURATION READY message.]
- [FDD The Node B shall use the first in the numbered list of the primary serving HS-DSCH cell"s HS-SCCH codes in the *HS-SCCH Preconfigured Codes* IE sent to the RNC to signal the Target Cell HS-SCCH Order defined in [18]. ]
- [FDD The Node B shall include, in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION READY message, IEs according to the rules defined for HS-DSCH Setup and: ]
  - [FDD if *HARQ Preamble Mode* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *HARQ Preamble Mode Activation Indicator* IE.]
  - [FDD if *MIMO Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE.]
  - [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used in the preconfigured configuration the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell.]
  - [FDD if Sixtyfour QAM Usage Allowed Indicator IE is included in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE or in the HS-DSCH Preconfiguration Setup IE the SixtyfourQAM DL Usage Indicator IE for each preconfigured cell.]
  - [FDD if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE.]

- [FDD if the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the Node B shall store this information in the preconfigured configuration.]
- [FDD if the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the Node B may store this information in the preconfigured configuration.]
- [FDD The Node B shall include in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION READY message the *E-DCH FDD DL Control Channel Information* containing the preconfigured configuration of the E-DCH serving cell according to the rules defined for Serving E-DCH Radio Link Change as follows:]
  - [FDD The Node B shall allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE.]
  - [FDD The Node B may configure for the preconfigured configuration the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving E-DCH RL and include these values in the *E-DCH FDD DL Control Channel Information* IE.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Non-Serving RL Preconfiguration Setup* IE in the *RL Information* IE and:]

- [FDD if the choice of *new Serving RL* is "New Serving RL in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE and/or *New non-serving RL E-DCH FDD DL Control Channel Information B* IEin the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK RECONFIGURATION READY message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL Not in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information C* IE in the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK RECONFIGURATION READY message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL in the Node B or New Serving RL Not in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE, the *New non-serving RL E-DCH FDD DL Control Channel Information B* IE and/or the *New non-serving RL E-DCH FDD DL Control Channel Information C* for the RL in the *Non-Serving RL Preconfiguration Info* IE in the RADIO LINK RECONFIGURATION READY message.]

### [FDD – Enhanced HS Serving Cell Change:]

[FDD - Upon receipt of the RADIO LINK RECONFIGURATION PREPARE message, if the Enhanced HS Serving Cell Change is preconfigured in the Node B for the Node B Communication Context, the Node B may execute the Enhanced HS Serving Cell Change procedure according to [49]]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Enhanced HS Serving CC Abort* IE in the *HS-DSCH Information To Modify* IE or the *HS-DSCH FDD Information* IE then the Node B shall not execute the synchronized Enhanced HS Serving Cell Change procedure when performing the Intra-Node B Serving HS-DSCH Radio Link Change or, at inter Node B radio link change, the HS-DSCH Setup.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Non-Serving RL Preconfiguration Removal* IE, the Node B shall remove the corresponding preconfigured E-DCH DL Control Channel Information according to the information.]

# [FDD - E-DCH Setup:]

[FDD - If the E-DCH FDD Information IE is present in the RADIO LINK RECONFIGURATION PREPARE message:]

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel information* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use

*Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]

- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Process Allocation* For 2ms Scheduled Transmission Grant IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Reference Power Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this Node B:]
  - [FDD The Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for
    the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding
    E-AGCH in the E-DCH FDD DL Control Channel Information IE in the RADIO LINK
    RECONFIGURATION READY message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK RECONFIGURATION READY message for the initial grant for the serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK RECONFIGURATION READY message for the serving E-DCH RL.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK RECONFIGURATION PREPARE message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If in the RADIO LINK RECONFIGURATION PREPARE message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive

number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *SixteenQAM UL Operation Indicator* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
- [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]

# [FDD - E-DCH Radio Link Handling:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH RL Indication* IE in the *RL Information* IE:]

- [FDD The Node B shall setup the E-DCH resources, as requested or as configured in the Node B communication context, on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The Node B may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE and the Node B may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message for every RL indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The Node B shall remove the E-DCH resources, if any, on the Radio Links, that are indicated by the *E-DCH RL Indication* set to "Non E-DCH".]
- [FDD For each RL for which the *E-DCH RL Indication* IE is set to "E-DCH", and which has or can have a common generation of E-RGCH information with another RL (current or future) when the Node B would contain the E-DCH serving RL, the Node B shall include the *E-DCH RL Set ID* IE in the RADIO LINK RECONFIGURATION READY message. The value of the *E-DCH RL Set ID* IE shall allow the RNC to identify the E-DCH RLs that have or can have a common generation of E-RGCH information.]

# [FDD - Serving E-DCH Radio Link Change:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the Serving E-DCH RL IE, this indicates the new Serving E-DCH Radio Link:]

- [FDD If the old Serving E-DCH RL is in this Node B, the Node B shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link at the activation of the new configuration.]
- [FDD If the new Serving E-DCH RL is in this Node B:]
  - [FDD The Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for
    the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code
    of the corresponding E-AGCH in the E-DCH FDD DL Control Channel Information IE in the RADIO LINK
    RECONFIGURATION READY message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK RECONFIGURATION READY message for the initial grant for the new serving E-DCH RL.]

- [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK RECONFIGURATION READY message for the new serving E-DCH RL.]
- [FDD The Node B may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Signature Sequence* IE or may alternatively include the *E-RGCH Release Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message for every E-DCH Radio Links in the Node B.]

### [FDD - E-DCH Modification:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH FDD Information To Modify* IE, then:]

- [FDD If the *E-DCH FDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the Node B shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the Node B shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH HARQ Power Offset FDD* IE in the *E-DCH FDD Information To Modify* IE for an E-DCH MAC-d flow the Node B shall use this information for calculating the unquantised gain factor for an E-TFC ( $\beta_{ed,i,uo}$ ) as defined in [10].]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains the E-DCH Grant Type and it is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH Grant Type and it is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information To Modify* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d PDU Size Format* IE in the *E-DCH FDD Information To Modify* IE, then the Node B shall use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the Node B shall use this information to add/delete the indicated logical channels. When an logical channel is deleted, all its associated configuration data shall also removed.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Logical Channel To Modify* IE, the Node B shall use this information to modify the indicated logical channels:]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the Node B shall apply the values in the new configuration.]

- [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the Node B shall apply the values in the new configuration.]
- [FDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the Node B shall apply the values in the new configuration.]
- [FDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the Node B shall apply the value in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information To Modify* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Process Allocation* For 2ms Scheduled Transmission Grant IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the E-DCH serving RL is in this Node B, the Node B may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission. In this case the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Reference Power Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-e Reset Indicator* IE in the *E-DCH FDD Information To Modify* IE, then the Node B shall use this value to determine whether MAC-e (or MAC-i) Reset is performed in the UE for sending the HARQ Failure Indication.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *SixteenQAM UL Operation Indicator* IE in the *E-DCH FDD Information To Modify* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]

- [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH DL Control Channel Grant Information* IE in the *E-DCH FDD Information To Modify* IE, the Node B may modify E-AGCH Channelisation Code, E-RGCH/E-HICH Channelisation Code, E-RGCH Signature Sequence and/or E-HICH Signature Sequence for the E-DCH RL indicated by the *E-DCH RL ID* IE. The Node B shall then report the modified configuration which is used in the new configuration specified in the *E-DCH FDD DL Control Channel Information* IE for each E-DCH RL in the RADIO LINK RECONFIGURATION READY message.]

### [FDD - E-DCH MAC-d Flow Addition/Deletion:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flows To Add* IE, then:]

- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the MAC-es Guaranteed Bit Rate IE in the E-DCH MAC-d Flows To Add IE, the Node B shall use this information to optimise MAC-e scheduling decisions.]

# [TDD - Intra-Node B Serving E-DCH Radio Link Change:]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Serving RL* IE, this indicates the new Serving E-DCH Radio Link:]

- [TDD In the new configuration the Node B shall de-allocate the E-DCH resources of the old Serving E-DCH Radio Link and allocate the E-DCH resources for the new Serving E-DCH Radio Link.]
- [TDD The Node B shall allocate E-AGCH parameters [1.28Mcps TDD and E-HICH parameters] corresponding to the E-DCH and include the *E-AGCH Specific Information Response TDD* IE [1.28Mcps TDD and *E-HICH Specific Information Response TDD* IE] in the *E-DCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]

# [TDD - E-PUCH Handling]:

[3.84Mcps TDD and 7.68Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-PUCH Information* IE, the Node B shall apply the parameters to the new configuration.]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-PUCH Information LCR* IE, the Node B shall apply the parameters to the new configuration.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-TFCS Information TDD* IE, the Node B shall apply the beta parameters to the new configuration.]

### [3.84Mcps TDD - E-DCH Setup]:

[3.84Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d* 

Flows to Add IE, E-DCH TDD Information IE and E-DCH Non-scheduled Grant Information TDD IE if there are to be non-scheduled grants.]

### [1.28Mcps TDD - E-DCH Setup]:

[1.28Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information LCR* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information LCR* IE and *E-DCH Non-scheduled Grant Information LCR TDD* IE if there are to be non-scheduled grants.]

# [7.68Mcps TDD - E-DCH Setup]:

[7.68Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information 7.68Mcps* IE and *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE if there are to be non-scheduled grants.]

### [TDD - E-DCH MAC-d Flow Addition/Deletion:]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining non-scheduled E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the non-scheduled E-DCH configuration from the Node B Communication Context and release the non-scheduled E-DCH resources [1.28 Mcps TDD - and the related Signature Sequence of the Non-scheduled E-HICH].]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flows To Add* IE, then:]

- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-e scheduling decisions.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Maximum Bit Rate LC*R IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]

### [3.84Mcps TDD - E-DCH Non-scheduled allocations:]

[3.84Mcps TDD - If the *E-DCH Non-scheduled Grant Information TDD* IE is present in the RADIO LINK RECONFIGURATION PREPARE message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

### [1.28Mcps TDD - E-DCH Non-scheduled allocations:]

[1.28Mcps TDD - If the *E-DCH Non-scheduled Grant Information LCR TDD* IE is present in the RADIO LINK RECONFIGURATION PREPARE message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

### [7.68Mcps TDD - E-DCH Non-scheduled allocations:]

[7.68Mcps TDD - If the *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE is present in the RADIO LINK RECONFIGURATION PREPARE message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

### [TDD - E-DCH Modification:]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH TDD Information To Modify* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d PDU Size Format* IE in the *E-DCH TDD Information To Modify* IE, then the Node B shall use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the [3.84Mcps TDD - *E-DCH TDD Information* IE][1.28Mcps TDD - *E-DCH TDD Information LCR* IE][7.68Mcps TDD - *E-DCH TDD Information* 7.68Mcps IE], then:]

- [3.84Mcps TDD If the *E-DCH TDD Information* IE includes the *E-DCH TDD Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Physical Layer Category LCR* IE or *Extended E-DCH Physical Layer Category LCR* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [7.68Mcps TDD If the *E-DCH TDD Information 7.68Mcps* IE includes the *E-DCH TDD Maximum Bitrate 7.68Mcps* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the [3.84Mcps TDD *E-DCH TDD Information* IE] [7.68Mcps TDD *E-DCH TDD Information* 7.68Mcps IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [TDD If the [3.84Mcps TDD *E-DCH TDD Information* IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] [7.68Mcps TDD *E-DCH TDD Information 7.68Mcps* IE]includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *Maximum Number of Retransmission for Scheduling Info* LCR IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE, then the Node B shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the  $\emph{E-DCH TDD Information To Modify}$  IE, then:]

- [TDD If the *E-DCH TDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the Node B shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [TDD If the *E-DCH TDD Information To Modify* IE message includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the Node B shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [1.28Mcps TDD If the *E-DCH TDD Information To Modify* IE message includes the *E-DCH MAC-d Flow Retransmission Timer* IE for an E-DCH MAC-d flow then the Node B shall use this information to set the retransmission timer.]
- [TDD If the *E-DCH TDD Information To Modify* IE message includes the *E-DCH HARQ Power Offset TDD* IE for an E-DCH MAC-d flow the Node B shall use this new power offset value.]

- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Grant Type* IE, the Node B shall treat the E-DCH MAC-d flow as Scheduled or Non-scheduled accordingly.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the Node B shall use this information to add/delete the indicated logical channels. When a logical channel is deleted, all its associated configuration data shall also removed.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Modify* IE, the Node B shall use this information to modify the indicated logical channels:]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the Node B shall apply the values in the new configuration.]
  - [1.28Mcps TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Maximum Bit Rate LC*R IE, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the Node B shall apply the value in the new configuration.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *MAC-e Reset Indicator* IE in the *E-DCH TDD Information To Modify* IE, then the Node B shall use this value to determine whether MAC-e (MAC-i) Reset is performed in the UE for sending the HARQ Failure Indication.]

### [FDD - Phase Reference Handling]:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Primary CPICH Usage For Channel Estimation* IE, the Node B shall assume that Primary CPICH usage for channel estimation has been reconfigured.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Secondary CPICH Information Change* IE, the Node B shall assume that Secondary CPICH usage for channel estimation has been reconfigured.]

### [FDD - Fast Reconfiguration]:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Fast Reconfiguration Mode* IE, the Node B shall, if supported, and if it is possible to base the synchronization of the reconfiguration on the detection of the change in the uplink scrambling code for this reconfiguration, include the *Fast ReconfigurationPermission* IE in the RADIO LINK RECONFIGURATION READY message.]

### [1.28Mcps TDD - Power Control GAP:]

[1.28Mcps TDD - If the *Power Control GAP* IE is included in the RADIO LINK RECONFIGURATION PREPARE message, the Node B may use the value for the power control for HS-SCCH and HS-SICH according to the [21].]

# [1.28Mcps TDD - E-UTRAN Inter-RAT measurement:]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Idle Interval Information* IE, if supported, the Node B shall use the value for E-UTRAN Inter-RAT measurement according to the [18].]

# [1.28Mcps TDD - HS-DSCH-RNTI for FACH:]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH-RNTI for FACH* IE, if supported, the Node B shall store this information and include the *E-RNTI for FACH* IE in the RADIO LINK RECONFIGURATION READY message.]

#### General

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IEs in the [TDD - *DSCHs To Modify, DSCHs To Add, USCHs To Modify, USCHs To Add*], *HS-DSCH Information*, *HS-DSCH Information To Modify, HS-DSCH MAC-d Flows To Add*, [TDD - *E-DCH MAC-d Flows to Add, E-DCH TDD Information to Modify* IE] [FDD - *RL Specific E-DCH Information* IE] or in the *RL Specific DCH Information* IEs, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exists a Prepared Reconfiguration, as defined in subclause 3.1.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] being added or any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included [FDD - if the *Transport Bearer Not Requested Indicator* IE is not included for this DCH,] only for one of the DCH in the set of co-ordinated DCHs.

[FDD - If the RADIO LINK RECONDIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for a DCH or an E-DCH MAC-d flow, then the Node B shall not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION READY message.]

[FDD - If the RADIO LINK RECONDIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for a DCH or an E-DCH MAC-d flow and:]

- [FDD if the Node B establishes a transport bearer for the concerned DCH or E-DCH MAC-d flow, the Node B shall include in the RADIO LINK RECONFIGURATION READY message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the DCH or E-DCH MAC-d flow being established.]
- [FDD if the Node B does not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow, the Node B shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION READY message.]

In the case of a Radio Link being combined with another Radio Link within the Node B, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links [FDD - if the *Transport Bearer Not Requested Indicator* IE is not included for this DCH].

[FDD - In the case of an E-DCH RL being combined with another E-DCH RL within the Node B, the *E-DCH FDD Information Response* IE shall be included only for one of the combined E-DCH RLs.]

# 8.3.2.3 Unsuccessful Operation

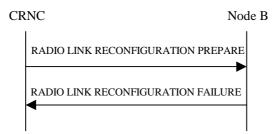


Figure 31: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

If the Node B cannot reserve the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be added, it shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed.

If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLs, the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

### **Radio Network Layer Cause**

- UL SF not supported
- DL SF not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- Number of DL codes not supported
- Number of UL codes not supported
- RL Timing Adjustment not supported
- F-DPCH not supported
- [FDD Continuous Packet Connectivity DTX-DRX operation not available]
- [FDD Continuous Packet Connectivity UE DTX Cycle not available]
- [FDD MIMO not available]
- E-DCH MAC-d PDU Size Format not available
- [FDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD Multi Cell operation not available.]
- [1.28Mcps TDD- MIMO not available]
- [1.28Mcps TDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD TX diversity for MIMO UE on DL Control Channels not available]
- [FDD Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available]

# **Transport Layer Cause**

- Transport Resources Unavailable

# Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

# 8.3.2.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD - or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes a *DCHs To Modify* IE or *DCHs To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs To Modify* IE or *DCHs To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-Static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *DL Reference Power* IE, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the Node B shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the RADIO LINK RECONFIGURATION PREPARE message IE includes more than one *DL Reference Power* IE, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the Node B shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message is to modify UE channel estimation information for an existing RL and the modification is not allowed according to [10] subclause 4.3.2.1, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify* IE deleting the last remaining Priority Queue of an HS-DSCH MAC-d Flow, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[TDD - If multiple radio links exist within the Node B Communication Context and the RADIO LINK RECONFIGURATION PREPARE message does not include a *RL ID* IE within each *UL DPCH To Add Per RL* IE, *DL DPCH To Modify Per RL* IE, and *DL DPCH To Modify Per RL* IE that is present in the message, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Indexed MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use Maximum MAC-d PDU Size Extended, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use MAC-d PDU Size Index, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Fixed MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use Maximum MAC-d PDU Size Extended, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use MAC-d PDU Size List, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *HS-DSCH Information* IE and if the *Measurement Power Offset* IE is not present, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message includes *HS-DSCH Information* IE and the HS-DSCH is already configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *F-DPCH Information* IE and the *DL DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned the Node B Communication Context is configured to use DPCH in the downlink in the old configuration and the RADIO LINK RECONFIGURATION PREPARE message includes the *DL DPCH Power Information* IE , then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to use F-DPCH in the downlink in the old configuration and the RADIO LINK RECONFIGURATION PREPARE message includes at least one but not all of the *TFCS* IE, *DL DPCH Slot Format* IE, *TFCI Signalling Mode* IE, *Multiplexing Position* IE, *Limited Power Increase* IE and *DL DPCH Power Information* IE in the *DL DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION PREPARE message, but the *E-DPCH Information* IE is not present or if any of the *Maximum Set of E-DPDCHs* IE, *Puncture Limit* IE, *E-TFCS Information* IE, *E-TTI* IE, *E-DPCCH Power Offset* IE, *E-RGCH 2-Index-Step Threshold* IE, *E-RGCH 3-Index-Step Threshold* IE, *HARQ Info for E-DCH* IE or *HS-DSCH Configured Indicator* IE are not present in the *E-DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Primary CPICH Usage For Channel Estimation* IE and/or *Secondary CPICH Information Change* IE and if in the new configuration Node B shall assume that the UE is not using the Primary CPICH for channel estimation nor the Secondary CPICH, Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes one of the *Not Used* IEs, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH RL Indication* IE set to "E-DCH", but no *E-DCH FDD Information* IE, and the Node B Communication Context is not configured for E-DCH, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH FDD Information* IE but no *E-DCH RL Indication* IE set to "E-DCH", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- If the RADIO LINK RECONFIGURATION PREPARE message contains the *HS-PDSCH RL ID* IE and/or the *Serving E-DCH RL* IE and if both HS-DSCH and E-DCH are configured in the new configuration but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not in the same cell then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains the *HS-PDSCH RL ID* IE and the *E-DPCH Information* IE which includes the *HS-DSCH Configured Indicator* IE set as 'HS-DSCH not configured' then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE or *E-DCH MAC-d Flows To Delete* IE in addition to the *E-DCH FDD Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE, *E-DCH MAC-d Flows To Delete* IE and the Node B Communication Context is not configured for E-DCH, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH FDD Information To Modify* IE deleting the last remaining E-DCH Logical Channel of an E-DCH MAC-d Flow, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes *E-DCH FDD Information* IE and the E-DCH is already configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [TDD if the radio link was not previously configured to support E-DCH, then if the RADIO LINK RECONFIGURATION PREPARE message includes one of the following E-DCH information elements then it shall contain all of them otherwise the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.: *E-DCH Serving RL* IE, [3.84Mcps TDD and 7.68Mcps TDD *E-PUCH Information* IE, *E-TFCS Information TDD* IE], [1.28Mcps TDD *E-PUCH Information LCR* IE, *E-TFCS Information TDD* IE], *E-DCH MAC-d Flows to Add* IE, and [3.84Mcps TDD *E-DCH TDD Information* IE], [1.28Mcps TDD *E-DCH TDD Information LCR* IE] [7.68Mcps TDD *E-DCH TDD Information 7.68Mcps* IE].]
- [FDD If the *Fast Reconfiguration* IE is included in the RADIO LINK RECONFIGURATION PREPARE message and the *UL Scrambling Code* IE does not indicate an uplink scrambling code different from the currently used uplink scrambling code the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE in addition to the *Continuous Packet Connectivity DTX-DRX Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE in addition to the *Continuous Packet Connectivity HS-SCCH less Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE while the Continuous Packet Connectivity HS-SCCH less configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity *DTX-DRX* configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *DRX Information To Modify* IE in *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity DRX configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only" but no *Transport Format Set* IE for the uplink for this DCH and the Node B had ignored the configuration of Transport Format Set for uplink, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.
- If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only" but no *Transport Format Set* IE for the downlink for this DCH and the Node B had ignored the configuration of Transport Format Set for downlink, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Bearer Not Requested Indicator* IE for a DCH but does not contain the corresponding *DCH ID* IE and the *Unidirectional DCH indicator* IE set to "Uplink DCH only" for the DCH in *DCH Information To Add* IE, the Node B shall reject the procedure using the the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the concerned Node B Communication Context is configured to apply UL DPCCH Slot Format 4 but is not configured to use F-DPCH, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the concerned Node B Communication Context is configured to apply UL DPCCH Slot Format 0 or 2 and execute Continuous Packet Connectivity DTX-DRX operation, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the concerned Node B Communication Context is configured to apply the "Closed loop mode 1" and if the concerned Node B Communication Context is not configured to apply UL DPCCH Slot Format 2 or 3, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the concerned Node B Communication Context is configured to apply MIMO, allowed to apply 64 QAM or establish the secondary serving HS-DSCH Radio Link but is not configured to use flexible MAC-d PDU Size, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains a *MIMO Activation Indicator* IE and an *Additional HS Cell Information RL Reconf Prep* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains an *Additional HS Cell Information RL Reconf Prep* IE and the concerned Node B Communication Context is configured to apply MIMO, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE for a DCH in the *RL Specific DCH Information* IE but does not include the *DCH ID* IE for the DCH in the *DCHs to Add* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains the *Continuous Packet Connectivity DTX-DRX Information* IE but does not contain the *F-DPCH Information* IE and the concerned Node B Communication Context is not previously configured to use F-DPCH, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the concerned Node B Communication Context is configured to have the Serving E-DCH Radio Link but there is at least one E-DCH MAC-d flow which the Transport Bearer is not configured in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE for a DCH for a specific RL and the specific RL is combined with existing RL which the transport bearer is

established for the DCH in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If ALCAP is not used, if the concerned Node B Communication Context is configured to establish a DCH, an E-DCH MAC-d flow and/or an HS-DSCH MAC-d flow but the RADIO LINK RECONFIGURATION PREPARE message does not include the *Transport Layer Address* IE and the *Binding ID* IE for the DCH, the E-DCH MAC-d flow and/or the HS-DSCH MAC-d flow, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[TDD - If ALCAP is not used, if the concerned Node B Communication Context is configured to establish a DSCH and/or a USCH but the RADIO LINK RECONFIGURATION PREPARE message does not include the *Transport Layer Address* IE and the *Binding ID* IE for the DSCH and/or the USCH, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Semi-Persistent scheduling Information to Modify LCR* IE in addition to the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Semi-Persistent scheduling Information to Modify LCR* IE in addition to the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If, in the new configuration, there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use 'Flexible RLC PDU Size' for an HS-DSCH but is not configured to use Maximum MAC-d PDU Size Extended, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use MAC-d PDU Size Index for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use 'Flexible RLC PDU Size', the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH FDD Secondary Serving Information* IE but does not contain the *C-ID* IE in the *Additional HS Cell Information RL Reconf Prep* IE or the message includes the *C-ID* IE but does not contain the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Reconf Prep* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *Diversity Mode* IE in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Reconf Prep* IE and the secondary serving HS-DSCH is already configured in the Node B Communication Context, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the secondary serving HS-DSCH is not configured in the Node B Communication Context and if the RADIO LINK RECONFIGURATION PREPARE message contains in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Reconf Prep* IE the *Diversity Mode* IE not set to "None" but not the *Transmit Diversity Indicator* or contains the *Transmit Diversity Indicator* but not the *Diversity Mode* IE not set to "None", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *Diversity Mode* IE in the *Secondary Serving Information To Modify* IE in the *Additional HS Cell Information RL Reconf Prep* IE and the *Non Cell Specific Tx Diversity* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

# 8.3.3 Synchronised Radio Link Reconfiguration Commit

# 8.3.3.1 General

This procedure is used to order the Node B to switch to the new configuration for the Radio Link(s) within the Node B, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

The message shall use the Communication Control Port assigned for this Node B Communication Context.

# 8.3.3.2 Successful Operation



Figure 32: Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation

The Node B shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure

- [TDD at the next coming CFN with a value equal to the value requested by the CRNC in the CFN IE (see ref.[17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the CRNC.]
- [FDD if the Fast Reconfiguration IE is not included in the RADIO LINK RECONFIGURATION COMMIT message at the next coming CFN with a value equal to the value requested by the CRNC in the *CFN* IE (see ref.[17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the CRNC.]
- [FDD if the Fast Reconfiguration IE is included in the RADIO LINK RECONFIGURATION COMMIT message as soon as the Node B detects that the UE uses the new configuration in the uplink (e.g. the Node B detects that the UE uses the new scrambling code used for the uplink by sending the RADIO LINK RESTORATION message). In order to limit the period for the detection in the Node B the CFN in the RADIO LINK RECONFIGURATION COMMIT message indicates the earliest possible time instant at which the UE might use the new configuration.]

[FDD - If the *Active Pattern Sequence Information* IE is included in the RADIO LINK RECONFIGURATION COMMIT message, the *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE shall be ignored by the Node B.]

[FDD - If the *Active Pattern Sequence Information* IE is not included in the RADIO LINK RECONFIGURATION COMMIT message and a new Compressed Mode Configuration exists in the prepared configuration, the Node B shall behave as if an *Active Pattern Sequence Information* IE with an empty *Transmission Gap Pattern Sequence Status* IE was included.]

When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

In the case of a Transport Channel or MAC-d flow modification for which a new transport bearer was requested and established, the switch to the new transport bearer shall also take place at the configuration switching point (defined above). The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1 and in [24], subclauses 5.8.2 and 5.8.3.

In the case of a signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has received the RADIO LINK RECONFIGURATION COMMIT message via the old Communication Control Port.

[FDD - If the RADIO LINK RECONFIGURATION COMMIT includes the *Active Pattern Sequence Information* IE, the Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the configuration switching point (defined above). From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions shall be started when the indicated *TGCFN* IE elapses. The *CFN* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value. If the values of the *CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CFN* IE.]

[FDD - If the RADIO LINK RECONFIGURATION COMMIT message includes the *Active Pattern Sequence Information* IE and the concerned Node B Communication Context is configured to use F-DPCH in the downlink, the Node B shall not transmit the F-DPCH during the downlink transmission gaps according to [7]. But in all slots outside of the downlink transmission gaps the NodeB shall transmit the F-DPCH with the normal scrambling code and the assigned slot format, regardless of the configured downlink compressed mode method information and of the transmission gap pattern sequence code information, if existing.]

### 8.3.3.3 Abnormal Conditions

If a new transport bearer is required for the new reconfiguration and it is not available at the configuration switching point (defined above), the Node B shall initiate the Radio Link Failure procedure.

[FDD - If the *Fast Reconfiguration* IE is included in the RADIO LINK RECONFIGURATION COMMIT message and the Node B did not include the *Fast ReconfigurationPermission* IE in the RADIO LINK RECONFIGURATION READY message, the Node B shall initiate the Radio Link Failure procedure.]

[FDD - If the RADIO LINK RECONFIGURATION COMMIT message includes the *Active Pattern Sequence Information* IE which activates a downlink transmission gap pattern sequence with an SF/2 downlink compressed mode method and if the concerned NodeB Communication Context is configured to use DPCH in downlink and for any Radio Link the transmission gap pattern sequence code information is not available, the NodeB shall trigger the Radio Link Failure procedure with the cause value 'Invalid CM Settings'.]

# 8.3.4 Synchronised Radio Link Reconfiguration Cancellation

# 8.3.4.1 General

This procedure is used to order the Node B to release the new configuration for the Radio Link(s) within the Node B, previously prepared by the Synchronised Radio Link Preparation Reconfiguration procedure.

The message shall use the Communication Control Port assigned for this Node B Communication Context.

# 8.3.4.2 Successful Operation



Figure 33:Synchronised Radio Link Reconfiguration Cancellation procedure, Successful Operation

When receiving the RADIO LINK RECONFIGURATION CANCEL message from the CRNC, the Node B shall release the new configuration ([FDD - including the new Transmission Gap Pattern Sequence parameters (if existing)]) previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure and continue using the old configuration. When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

# 8.3.4.3 Abnormal Conditions

# 8.3.5 Unsynchronised Radio Link Reconfiguration

# 8.3.5.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Unsynchronised Radio Link Reconfiguration procedure is used when there is no need to synchronise the time of the switching from the old to the new configuration in one Node B used for a UE-UTRAN connection with any other Node B also used for the UE-UTRAN connection.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

# 8.3.5.2 Successful Operation

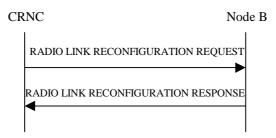


Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the CRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

### **DCH Modification:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Modify* IE then the Node B shall treat them each as follows:

- If the *DCHs To Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs To Modify* IE includes the *TNL QoS* IE for a DCH or a set of co-ordinated DCHs to be modified and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply for the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the UL, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the DL, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *Allocation/Retention Priority* IE for a DCH, the Node B shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCHs To Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.]
- [FDD If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

### **DCH Addition:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCH To Add* IE, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCHs in the new configuration. In particular:

- If a *DCHs To Add* IE includes multiple *DCH Specific Info* IEs for a DCH to be added, the Node B shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.
- [FDD For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Node B shall use the Transport channel BER from that DCHas the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Node B shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" as the QE in the UL data frames [16]. [FDD If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply for the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Startpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be added, the Node B shall apply the new CCTrCH ID in the downlink of this DCH in the new configuration.]

- [TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be added, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

### **DCH Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the Node B shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

### [FDD - Physical Channel Modification]:

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPDCH Indicator For E-DCH Operation* IE set to "UL DPDCH not present", the UL DPDCH resources shall be removed from the configuration.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes a *DL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD If the *DL DPCH Information* IE includes on the *TFCS* IE for the DL, the Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the Node B shall use the information when building TFCIs in the new configuration.
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. Any Transmission Gap Pattern Sequences already existing in the previous Compressed Mode Configuration are replaced by the new sequences once the new Compressed Mode Configuration has been activated. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information* IE, then:]

- [FDD The Node B shall configure the concerned Node B Communication Context for DTX operation according to [10].]
- [FDD If *DRX Information* IE is included in the *Continuous Packet Connectivity DTX-DRX Information* IE, then the Node B shall configure the concerned Node B Communication Context for DRX operation according to [10].]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then:]

- [FDD If the *UE DTX DRX Offset* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall apply the indicated Offset in *UE DTX DRX Cycle* IE in the new configuration.]
- [FDD If the *Enabling Delay* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this value to determine the beginning of uplink transmission in the new configuration according to [10] .]

- [FDD If the *DTX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this information to modify the indicated DTX Information parameter in the new configuration. If the choice of *DTX Information To Modify* IE is "Deactivate", then DRX should be deactived together with DTX.]
- [FDD If the *DRX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this information to modify the indicated DRX Information in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Information* IE, then:]

- [FDD The Node B shall configure the Serving HS-DSCH Radio Link for Continuous Packet Connectivity HS-SCCH less operation in the new configuration according to [10].]
- [FDD The Node B shall allocate the HS-PDSCH codes needed for HS-SCCH less operation and include the *Continuous Packet Connectivity HS-SCCH less Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If at least one of *HS-PDSCH Second Code Support* IE is set to "True", then the Node B shall include *HS-PDSCH Second Code Index* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE, then the Node B shall deactivate the Continuous Packet Connectivity HS-SCCH less operation for the HS-DSCH Radio Link.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DRX Information LCR* IE, then the Node B shall take account into these parameters to decide the DRX operation related parameters and configure the concerned Node B Communication Context for DRX operation according to [21] and include the parameter(s) in the *Continuous Packet Connectivity DRX Information Response LCR* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then:]

- [1.28 Mcps TDD If the *UE DTX DRX Offset* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the Node B shall apply the indicated Offset in *UE DTX DRX Cycle* IE in the new configuration.]
- [1.28 Mcps TDD If the *Enabling Delay* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the Node B shall use this value to determine the beginning of uplink transmission in the new configuration according to [21].]
- [1.28 Mcps TDD If the *DRX Information To Modify* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the Node B shall use this information to modify the indicated DRX Information in the new configuration.]
- [1.28 Mcps TDD If the *Inactivity Threshold for UE DRX Cycle Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the NodeB may use this value to determine the Inactivity Threshold for UE DRX Cycle according to [21].]
- [1.28 Mcps TDD If the *Enabling Delay Ext* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the Node B may use this value to determine the beginning of uplink transmission in the new configuration according to [21].]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then:]

- [1.28 Mcps TDD The Node B shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for HS-DSCH Semi-Persistent scheduling operation according to [21].]
- [1.28 Mcps TDD The Node B shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK RECONFIGURATION READY message.]

- [1.28 Mcps TDD - If the HS-DSCH Semi-Persistent Resource Reservation Indicator IE is included in the HS-DSCH Semi-Persistent scheduling Information LCR IE, then the Node B shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Semi-*Persistent scheduling Information LCR IE, then:]

- [1.28 Mcps TDD The Node B shall configure the Serving E-DCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to [21].]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the Node B shall include *Allcoated E-DCH Semi-persistent resource* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, then:]

- [1.28 Mcps TDD If the *Transport Block Size List* IE or/and *Repetition Period list* IE is/are included in the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, the Node B shall modify the configuration of Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for HS-DSCH Semi-Persistent scheduling operation according to [21].
- [1.28 Mcps TDD If the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE is included in the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, the Node B shall use this information to modify the buffer size for HS-DSCH Semi-Persistent scheduling operation.
- [1.28 Mcps TDD If the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE is included in the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, the Node B shall use this information to allocate the number of processes for HS-DSCH Semi-Persistent scheduling operation.
- [1.28 Mcps TDD The Node B shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28 Mcps TDD If the HS-DSCH Semi-Persistent Resource Reservation Indicator IE is included in the HS-DSCH Semi-Persistent scheduling Information to modify LCR IE, then the Node B shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [1.28 Mcps TDD If the *HS-DSCH Semi-Persistent scheduling operation Indicator* IE is included in the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, then the Node B shall apply this information for HS-DSCH Semi-Persistent scheduling operation.]
- [1.28 Mcps TDD If the buffer size for HS-DSCH Semi-Persistent scheduling needs to be modified, then the Node B shall include the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28 Mcps TDD If the number of processes for HS-DSCH Semi-Persistent scheduling needs to be modified, then the Node B shall include the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, then:]

- [1.28 Mcps TDD If the *Repetition Period list* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, the Node B shall modify the configuration of Serving E-DCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to [21].
  - [1.28 Mcps TDD If the *E-DCH Semi-Persistent scheduling Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, then the Node B shall apply this information for E-DCH Semi-Persistent scheduling operation.]
- [1.28 Mcps TDD If the Semi-Persistent E-DCH releted E-HICH Information IE is included in the E-DCH Semi-Persistent scheduling Information to modify LCR IE, then the Node B shall use this information to modify the configuration of Semi-Persistent E-DCH releted E-HICH.]

- [1.28 Mcps TDD - If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, then the Node B shall include *Allcoated E-DCH Semi-persistent resource* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR* IE, then the Node B shall deactivate the HS-DSCH Semi-Persistent scheduling operation for the HS-DSCH Radio Link.]

[1.28 Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Semi-Persistent scheduling Deactivate Indicator LCR* IE, then the Node B shall deactivate the E-DCH Semi-Persistent scheduling operation for the E-DCH Radio Link.]

### [FDD - E-DPCH Handling]:

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DPCH Information* IE which contains the *E-TFCS Information* IE, the Node B shall use the *E-TFCS Information* IE for the E-DCH when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the uplink of the new configuration. If the *E-TFCS Information* IE contains the *E-DCH Minimum Set E-TFCI* IE the Node B shall use the value for the related resource allocation operation.]

[FDD - If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DPDCH Power Interpolation* IE, the Node B shall use the value to determine the applicable E-DPDCH power formula defined in [10]. If the *E-DPDCH Power Interpolation* IE is not present, the Node B shall use the E-DPDCH power extrapolation formula defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION REQUEST message.]

[FDD - If the *E-TFCI Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the Node B shall use the information according to [10]. If the *E-TFCI Boost Information* IE is not present, the Node B shall use the E-TFCI BetaEC Boost value "127" in the algorithm defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION PREPARE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *E-DPCCH Power Offset* IE, the Node B shall use the value when the new configuration is being used.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *E-RGCH 2-Index-Step* IE, the Node B shall use the value when the new configuration is being used.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *E-RGCH 3-Index-Step* IE, the Node B shall use the value when the new configuration is being used.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *HARQ Info for E-DCH* IE, the Node B shall use the value when the new configuration is being used.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *Minimum Reduced E-DPDCH Gain Factor* IE, then the Node B shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the Node B Communication Context, the Node B may use the default value defined in [18].

# [TDD - UL/DL CCTrCH Modification]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Modify* IE or *DL CCTrCH To Modify* IE in the Radio Link(s), the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD - If the *UL CCTrCH To Modify* IE or *DL CCTrCH To Modify* IE includes *TFCS* IE and/or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

[1.28Mcps TDD - If the *UL CCTrCH To Modify* IE includes *UL SIR Target* IE, the Node B shall apply this value as the new configuration and use it for the UL inner loop power control according [19] and [21].]

# [TDD - UL/DL CCTrCH Deletion]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Delete* IE or *DL CCTrCH To Delete* IE, the Node B shall not include this CCTrCH in the new configuration.]

### **DL Power Control:**

- [FDD - If the *Radio Link Information* IE includes the *DL Reference Power* IE and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported, using the *DL Reference Power* IE in the RADIO LINK RECONFIGURATION REQUEST message. The updated reference power shall be used from the next adjustment period.]

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

### **RL Information:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and not transmit with a higher power on any Downlink DPCH or on the F-DPCH of the Radio Link once the new configuration is being used. During compressed mode, the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [FDD If the *RL Information* IE includes the *Minimum DL Power* IE, the Node B shall apply this value to the new configuration and never transmit with a lower power on any Downlink Channelisation Code or on the F-DPCH of the Radio Link once the new configuration is being used.]
- [3.84 Mcps TDD and 7.68Mcps TDD If the *CCTrCH Maximum DL Transmission Power* IE and/or the *CCTrCH Minimum DL Transmission Power* IE are included, the Node B shall apply the values in the new configuration for this DCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other DCH type CCTrCHs.]
- [3.84 Mcps TDD and 7.68Mcps TDD The maximum power and minimum power for a DSCH type CCTrCH to be modified, shall be determined as follows:
  - If the DSCH type CCTrCH is paired with an uplink CCTrCH(s) for inner loop power control, the minimum and maximum power for each PDSCH is determined in the same way as described above for DCH type CCTrCHs.
  - If the DSCH type CCTrCH is not paired with an uplink CCTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCTrCHs. The minimum power, however, is subject to control by the CRNC via the frame protocol].
- [1.28 Mcps TDD If *Maximum DL Power* IE and/or *Minimum DL Power* IE are included within *DL Timeslot Information LCR* IE, the Node B shall apply the values in the new configuration for this timeslot within a DCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [1.28 Mcps TDD If the *CCTrCH Maximum DL Transmission Power* IE and/or the *CCTrCH Minimum DL Transmission Power* IE are included, the Node B shall apply the values in the new configuration for this DSCH type CCTrCH, if the *RL Information* IE includes the *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for other timeslots.]
- [FDD If the concerned Node B Communication Context is configured to use DPCH in the downlink and if the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- [1.28Mcps TDD If the *RL Information* IE contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]
- [FDD If the *RL Information* IE contains the *F-DPCH Slot Format* IE and if the Node B Communication Context is configured to use F-DPCH in the downlink, then the Node B shall use this information to configure the F-DPCH slot format of each RL according to [7].]

# **Signalling Bearer Re-arrangement:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Signalling Bearer Request Indicator* IE, the Node B shall allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

# **HS-DSCH Setup:**

If the HS-DSCH Information IE is present in the RADIO LINK RECONFIGURATION REQUEST message, then:

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message. [FDD The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.] [1.28Mcps TDD- The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The Node B shall include the HS-DSCH Initial Capacity Allocation IE in the [FDD HS-DSCH FDD Information Response IE] [TDD HS-DSCH TDD Information Response IE] in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK RECONFIGURATION REQUESTmessage includes HS-DSCH MAC-d PDU Size Format IE in the HS-DSCH Information IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the HS-DSCH Initial Capacity Allocation IE the values for the peer of Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE to the values of the corresponding peer received in RADIO LINK RECONFIGURATION REQUEST in the HS-DSCH MAC-d Flows Information IE in the HS-DSCH Information IE for a Priority Queue including Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE.
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific

*Information Response LCR* IE] [7.68Mcps TDD - *HS-SCCH Specific Information Response* 7.68Mcps IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the HARQ Preamble Mode IE in the HS-DSCH Information IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the HARQ Preamble Mode Activation Indicator IE in the HS-DSCH Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the HARQ Preamble Mode IE is not included or if the mode 0 is applied, then the Node B shall not include the HARQ Preamble Mode Activation Indicator IE in the HS-DSCH Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SICH SIR Target* IE in the *HS-DSCH Information* IE, the Node B shall use this value to determine the HS-SICH SIR Target. The *HS-SICH SIR Target* IE indicates the received UL SIR target of HS-SICH NACK for this UE.]
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- [FDD If the *MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B shall activate the MIMO mode for the HS-DSCH Radio Link and the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B may use:]
  - [FDD a different HS-SCCH in consecutive TTIs for this UE]
  - [FDD HS-SCCH orders for the case of HS-SCCH-less operation to this UE]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE the Node B may use the supported HSDPA functions for this UE.
- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]
- [1.28Mcps TDD For a multi-frequency cell, if the RADIO LINK RECONFIGURATION REQUEST message includes the *Number of Supported Carriers* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information to allocate HSDPA resources over multiple frequencies for UE.]
- [1.28Mcps TDD For a multi-frequency cell, if the RADIO LINK RECONFIGURATION REQUEST message includes the *Multi-carrier HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information together with the *HS-DSCH Physical Layer*

Category IE in the UE Capabilities Information IE in the HS-DSCH Information IE to allocate HSDPA resources over multiple carriers for the UE.]

- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH over multiple frequencies and include the *HS-SCCH Specific Information Response LCR per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B shall include the *HARQ Memory Partitioning per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B may indicate the number of multiple frequencies actually used by the UE and include the *Multi-Carrier number* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [1.28 Mcps TDD If the *MIMO Activation Indicator* IE is included in the *HS-DSCH TDD Information* IE, then, the Node B shall activate the MIMO mode for the HS-DSCH Radio Link, decide the SF mode for HS-PDSCH dual stream and include the *MIMO SF Mode for HS-PDSCH dual stream* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- If the RADIO LINK RECONFIGURATION REQUEST message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the *DL RLC PDU Size Format* IE may be used by the Node B to determine the allocated capacity on user plane as described in [24].

### [FDD – Secondary Serving HS-DSCH Setup:]

[FDD – If the *C-ID* IE is present in the *Additional HS Cell Information RL Reconf Req* IE in the RADIO LINK RECONFIGURATION REQUEST message, then:]

- [FDD The Node B shall setup the requested HS-PDSCH resources on the secondary serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and include the *HS-SCCH Specific Secondary Serving Information Response* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the concerned Node B Communication Context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH Radio Link, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]

### Intra-Node B Serving HS-DSCH Radio Link Change:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- The Node B shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.
- The Node B may include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message. [FDD The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.] [1.28Mcps TDD- The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- If a reset of the MAC-hs is not required the Node B shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify IE and the value is set to "allowed" or if HS-DSCH Information To Modify IE is not included and the Node B Communication Context is configured with Sixtyfour QAM allowed for the serving HS-DSCH Radio Link and not used in the current configuration and then if the Node B decides to use 64 QAM in the new configuration, then it shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

# [FDD – Intra-Node B Secondary Serving HS-DSCH Radio Link Change:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *C-ID* IE and the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Reconf Req* IE and the secondary serving HS-DSCH Radio Link has been configured in the Node B, then the *HS-PDSCH RL ID* IE indicates the new secondary serving HS-DSCH Radio Link:]

- [FDD The Node B shall release the HS-PDSCH resources on the old secondary serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new secondary serving HS-DSCH Radio Link. The Node B shall remove the old secondary serving HS-PDSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Secondary Serving Information Response* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE and the value is set to "allowed" or if HS-DSCH FDD Secondary Serving Information To Modify IE is not included and the Node B Communication Context is configured with Sixtyfour QAM allowed for the secondary serving HS-DSCH Radio Link and not used in the current configuration and then if the Node B decides to use 64 QAM for the new secondary serving HS-DSCH Radio Link, then it shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

# **HS-DSCH Modification:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information To ModifyUnsynchronised* IE and if the Serving HS-DSCH Radio Link is in the Node B, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE for every HS-DSCH MAC-d flow being modified for which the establishment of one or several new Priority Queues was requested, if the Node B allows the CRNC to start the transmission of MAC-d PDUs for the Priority Queue(s) being established before the Node B has allocated capacity on user plane as described in [24]. If Node B Communication Context is configured to use the "Flexible MAC-d PDU Size", then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer for the Priority Queue of Node B Communication Context.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use the indicated ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the TDD ACK NACK Power Offset IE in the HS-DSCH Information To ModifyUnsynchronised IE, the Node B shall use the indicated power offset in the new configuration.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the HS-SICH SIR Target IE in the HS-DSCH Information To Modify Unsynchronised IE, the Node B shall use this value to the SIR Target in the new configuration. The HS-SICH SIR Target IE indicates the received UL SIR target of HS-SICH NACK for this UE.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SICH TPC* step size IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the Node B shall use this value to the HS-SICH TPC step size in the new configuration.]
- [1.28Mcps TDD For a multi-frequency cell, if the RADIO LINK RECONFIGURATION REQUEST message includes the *Multi-carrier HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the Node B shall use this information together with the *HS-DSCH Physical Layer Category* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information To Modify Unsynchronised* IE to allocate HSDPA resources over multiple carriers for the UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use the indicated HARQ Preamble Mode in the new configuration as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the Node B shall not include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Physical Layer Category* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the Node B shall use this information in the new configuration and may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]

- [FDD If the *MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE, then the Node B shall activate/deactivate the MIMO mode for the HS-DSCH Radio Link in accordance with the *MIMO Mode Indicator* IE.]
- [FDD If the *MIMO Mode Indicator* IE is set to "Activate", then the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD Any secondary serving HS-DSCH that was applied in the old configuration shall remain in the new configuration unless it is explicitly removed.]
- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]
- [1.28Mcps TDD- If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Physical Layer Category* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the Node B shall use this information in the new configuration and may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [1.28Mcps TDD- If the *MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE, then the Node B shall activate/deactivate the MIMO mode for the HS-DSCH Radio Link in accordance with the *MIMO Mode Indicator* IE.]
  - [1.28 Mcps TDD If the *MIMO Mode Indicator* IE is set to "Activate", then the Node B shall decide the SF mode for HS-PDSCH dual stream and include the *MIMO SF Mode for HS-PDSCH dual stream* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE the Node B may use the supported HSDPA functions for this UE.

# [FDD – Secondary Serving HS-DSCH Modification:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH FDD Secondary Serving Information To ModifyUnsynchronised* IE in the *Additional HS Cell Information RL Reconf Req* IE and if the Secondary Serving HS-DSCH Radio Link is in the Node B, then:]

- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH FDD Secondary Serving Information To ModifyUnsynchronised* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE with value set to "not allowed", then the Node B shall not use 64 QAM for the Secondary Serving HS-DSCH Radio Link.]

- [FDD - If, in the new configuration, the concerned Node B Communication Context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH Radio Link, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]

### [FDD – Secondary Serving HS-DSCH Removal:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Secondary Serving Remove* IE in the *Additional HS Cell Information RL Reconf Req* IE, then the indicated secondary serving HS-DSCH Radio Link shall be removed.]

### **HS-DSCH MAC-d Flow Addition/Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs and if the Serving HS-DSCH Radio Link is in the Node B, then the Node B shall use this information to add/delete the indicated HS-DSCH MAC-d flows on the Serving HS-DSCH Radio Link. When an HS-DSCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.

If the RADIO LINK RECONFIGURATION REQUEST message includes an *HS-DSCH MAC-d Flows To Delete* IE requesting the deletion of all remaining HS-DSCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the HS-DSCH configuration from the Node B Communication Context and release any existing HS-PDSCH resources.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d Flows To Add* IE and if the Serving HS-DSCH Radio Link is in the Node B, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being added, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If Node B Communication Context is configured to use the "Flexible MAC-d PDU Size" format for the HS-DSCH, then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer received in RADIO LINK RECONFIGURATION REQUEST message in the *HS-DSCH MAC-d Flows To Add* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- If the RADIO LINK RECONFIGURATION REQUEST message includes *DL RLC PDU Size Format* IE for a Priority Queue in the in the *HS-DSCH MAC-d Flows To Add* IE, the *DL RLC PDU Size Format* IE may be used by the Node B to determine the allocated capacity on user plane as described in [24].

# [FDD – HS-DSCH Preconfiguration for Enhanced HS Serving Cell Change]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Preconfiguration Setup* IE in the *RL Information* IE the Node B shall if supported preconfigure the indicated cells for Enhanced HS Serving Cell Change according to [49]: ]

- [FDD The Node B shall preconfigure sets of HS-SCCH codes on the cells preconfigured for HS-DSCH, primary serving HS-DSCH cell, as well as on the secondary serving HS-DSCH cells. The primary serving HS-DSCH cell is designated through the *C-ID* IE part of the *RL Information* IE in the RADIO LINK RECONFIGURATION REQUEST message. The list of secondary serving HS-DSCH cells is designated by the list of *C-ID*s in the *HS-DSCH Preconfiguration Setup* IE part of the *RL Information* IE in the RADIO LINK RECONFIGURATION REQUEST message.]
- [FDD The number of HS-SCCH codes to preconfigure for each cell may be optionally specified: ]
  - [FDD by the *Num Primary HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Setup* IE, for the primary serving HS-DSCH cell]
  - [FDD by the *Num Secondary HS-SCCH Codes* IE in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE for each of the secondary serving HS-DSCH cells]
- [FDD If *Num Primary HS-SCCH Codes* IE or *Num Secondary HS-SCCH Codes* IE is not included in the message, the number and distribution of codes on primary and any secondary cells shall be preconfigured to satisfy any limitations in [10].
- [FDD The Node B shall return these codes in the Sets of HS-SCCH Codes IE in the HS-DSCH
   Preconfiguration Info IE in the RL Information Response IE of the RADIO LINK RECONFIGURATION
   RESPONSE message. ]
- [FDD The Node B shall use the first in the numbered list of the primary serving HS-DSCH cell"s HS-SCCH codes in the *HS-SCCH Preconfigured Codes* IE sent to the RNC to signal the Target Cell HS-SCCH Order defined in [18].]
- [FDD The Node B shall include, in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message, IEs according to the rules defined for HS-DSCH Setup and: ]
  - [FDD if *HARQ Preamble Mode* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *HARQ Preamble Mode Activation Indicator* IE]
  - [FDD if *MIMO Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE ]
  - [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used in the preconfigured configuration the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell]
  - [FDD if Sixtyfour QAM Usage Allowed Indicator IE is included in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE or in the HS-DSCH Preconfiguration Setup IE the SixtyfourQAM DL Usage Indicator IE for each preconfigured cell]
  - [FDD if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE]
  - [FDD if the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the Node B shall store this information in the preconfigured configuration.]
  - [FDD if the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the Node B may store this information in the preconfigured configuration.]
- [FDD The Node B shall include in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message the *E-DCH FDD DL Control Channel Information* containing the preconfigured configuration of the E-DCH serving cell according to the rules defined for Serving E-DCH Radio Link Change as follows:]
  - [FDD The Node B shall allocate for the preconfigured configuration a primary E-RNTI identifier or a
    secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI
    identifiers along with the channelisation code of the corresponding E-AGCH in the E-DCH FDD DL
    Control Channel Information IE.]

- [FDD – The Node B may configure for the preconfigured configuration the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving E-DCH RL and include these values in the *E-DCH FDD DL Control Channel Information* IE.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Non-Serving RL Preconfiguration Setup* IE in the *RL Information* IE and:]

- [FDD if the choice of *new Serving RL* is "New Serving RL in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE and/or *New non-serving RL E-DCH FDD DL Control Channel Information B* IEin the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL Not in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information C* IE in the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL in the Node B or New Serving RL Not in the Node B", the Node B may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE, the *New non-serving RL E-DCH FDD DL Control Channel Information B* IE and/or the *New non-serving RL E-DCH FDD DL Control Channel Information C* for the RL in the *Non-Serving RL Preconfiguration Info* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

### [FDD – Enhanced HS Serving Cell Change:]

[FDD - Upon receipt of the RADIO LINK RECONFIGURATION REQUEST message, if the Enhanced HS Serving Cell Change is preconfigured in the Node B for the Node B Communication Context, the Node B may execute the Enhanced HS Serving Cell Change procedure according to [49]]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Enhanced HS Serving CC Abort* IE in the *HS-DSCH Information To Modify Unsynchronised* IE or the *HS-DSCH FDD Information* IE then the Node B shall not execute the unsynchronized Enhanced HS Serving Cell Change procedure when performing the Intra-Node B Serving HS-DSCH Radio Link Change or, at inter Node B radio link change, the HS-DSCH Setup.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *No of Target Cell HS-SCCH Order* IE then the Node B shall repeat the Target Cell HS-SCCH Order on the HS-SCCH the number of times defined in the IE. ]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Non-Serving RL Preconfiguration Removal* IE, the Node B shall remove the corresponding preconfigured E-DCH DL Control Channel Information according to the information.]

# [FDD - E-DCH Setup:]

[FDD - If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION REQUEST message:]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel information* IE in the *E-DCH MAC-d Flows Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the Node B shall use this information for the related resource allocation operation.]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Reference Power Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Power Offset* for Scheduling Info IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the Serving E-DCH RL IE:]
  - [FDD the Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK RECONFIGURATION RESPONSE message for the initial grant for the serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the E-DCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK RECONFIGURATION RESPONSE message for the serving E-DCH RL.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK RECONFIGURATION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If in the RADIO LINK RECONFIGURATION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DPCH Information* IE which contains the *HS-DSCH Configured Indicator* IE and/or the *Maximum Set of E-DPDCHs* IE, and/or the *Puncture Limit* IE and/or the *E-TTI* IE, the Node B shall use and apply the value(s) in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *SixteenQAM UL Operation Indicator* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
- [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]

#### [FDD - E-DCH Radio Link Handling:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH RL Indication* IE in the *RL Information* IE:]

- [FDD The Node B shall setup the E-DCH resources, as requested or as configured in the Node B communication context, on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The Node B may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE and the Node B may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every RL indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The Node B shall remove the E-DCH resources, if any, on the Radio Links, that are indicated by the *E-DCH RL Indication* set to "Non E-DCH".]
- [FDD For each RL for which the *E-DCH RL Indication* IE is set to "E-DCH", and which has or can have a common generation of E-RGCH information with another RL (current or future) when the Node B would contain the E-DCH serving RL, the Node B shall include the *E-DCH RL Set ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The value of the *E-DCH RL Set ID* IE shall allow the RNC to identify the E-DCH RLs that have or can have a common generation of E-RGCH information.]

#### [FDD - Serving E-DCH Radio Link Change:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the Serving E-DCH RL IE, this indicates the new Serving E-DCH Radio Link:]

- [FDD If the old Serving E-DCH RL is in this Node B, the Node B shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link.]
- [FDD If the New Serving E-DCH RL is in this Node B:]
  - [FDD The Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK RECONFIGURATION RESPONSE message for the initial grant for the new serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK RECONFIGURATION RESPONSE message for the new serving E-DCH RL.]
- [FDD The Node B may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Signature Sequence* IE or may alternatively include the *E-RGCH Release Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every E-DCH Radio Links in the Node B.]

# [FDD - E-DCH Modification:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information To Modify* IE, then:]

- [FDD If the *E-DCH FDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the Node B shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the Node B shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH HARQ Power Offset FDD* IE in the *E-DCH FDD Information To Modify* IE for an E-DCH MAC-d flow the Node B shall use this information for calculating the unquantised gain factor for an E-TFC ( $\beta_{ed,i,uq}$ ) as defined in [10].]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message contains the E-DCH Grant Type and it is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the E-DCH Grant Type and it is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION RE QUEST message includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the Node B shall use this information to add/delete the indicated logical channels. When an logical channel is deleted, all its associated configuration data shall also removed.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Logical Channel To Modify* IE, the Node B shall use this information to modify the indicated logical channels:]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the Node B shall apply the value in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information To Modify* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to

"2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Process Allocation* For 2ms Scheduled Transmission Grant IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the E-DCH serving RL is in this Node B, the Node B may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission. In this case the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the E-DCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Reference Power Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Power Offsetfor Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *SixteenQAM UL Operation Indicator* IE in the *E-DCH FDD Information To Modify* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
- [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH DL Control Channel Grant Information* IE in the *E-DCH FDD Information To Modify* IE, the Node B may modify E-AGCH Channelisation Code, E-RGCH/E-HICH Channelisation Code, E-RGCH Signature Sequence and/or E-HICH Signature Sequence for the E-DCH RL indicated by the *E-DCH RL ID* IE. The Node B shall then report the modified configuration which is used in the new configuration specified in the *E-DCH FDD DL Control Channel Information* IE for each E-DCH RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### [FDD - E-DCH MAC-d Flow Addition/Deletion:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flows To Add* IE, then:]

- [FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-e scheduling decisions.]

#### [TDD - Intra-Node B Serving E-DCH Radio Link Change:]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Serving RL* IE, this indicates the new Serving E-DCH Radio Link:]

- [TDD In the new configuration the Node B shall de-allocate the E-DCH resources of the old Serving E-DCH Radio Link and allocate the E-DCH resources for the new Serving E-DCH Radio Link.]
- [TDD The Node B shall allocate E-AGCH parameters [1.28Mcps TDD and E-HICH parameter] corresponding to the E-DCH and include the *E-AGCH Specific Information Response TDD* IE [1.28Mcps TDD and *E-HICH Specific Information Response TDD* IE]in the *E-DCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]

## [TDD - E-PUCH Handling]:

[3.84Mcps TDD and 7.68Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an E-PUCH Information IE, the Node B shall apply the parameters to the new configuration.]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-PUCH Information LCR* IE, the Node B shall apply the parameters to the new configuration.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-TFCS Information TDD* IE, the Node B shall apply the beta parameters to the new configuration.]

[1.28 Mcps TDD - The Node B shall configure the HS-SCCH TPC step size to the same value as the *E-AGCH TPC step size* IE configured in *E-PUCH Information LCR* IE in the *E-DCH Information 1.28Mcps* IE.]

## [3.84Mcps TDD - E-DCH Setup]:

[3.84Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information* IE and *E-DCH Non-scheduled Grant Information TDD* IE if there are to be non-scheduled grants.]

# [1.28Mcps TDD - E-DCH Setup]:

[1.28Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information LCR* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information LCR* IE and *E-DCH Non-scheduled Grant Information LCR TDD* IE if there are to be non-scheduled grants.]

## [7.68Mcps TDD - E-DCH Setup]:

[7.68Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d* 

Flows to Add IE, E-DCH TDD Information 7.68Mcps IE and E-DCH Non-scheduled Grant Information 7.68Mcps TDD IE if there are to be non-scheduled grants.]

#### [TDD - E-DCH MAC-d Flow Addition/Deletion:]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining non-scheduled E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the non-scheduled E-DCH configuration from the Node B Communication Context and release the non-scheduled E-DCH resources [1.28 Mcps TDD - and the related Signature Sequence of the Non-scheduled E-HICH].]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flows To Add* IE, then if the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-e scheduling decisions.]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Maximum Bit Rate LCR* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]

#### [3.84Mcps TDD - E-DCH Non-scheduled allocations:]

[3.84Mcps TDD - If the *E-DCH Non-scheduled Grant Information TDD* IE is present in the RADIO LINK RECONFIGURATION REQUEST message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

## [1.28Mcps TDD - E-DCH Non-scheduled allocations:]

[1.28Mcps TDD - If the *E-DCH Non-scheduled Grant Information LCR TDD* IE is present in the RADIO LINK RECONFIGURATION REQUEST message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

#### [7.68Mcps TDD - E-DCH Non-scheduled allocations:]

[7.68Mcps TDD - If the *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE is present in the RADIO LINK RECONFIGURATION REQUEST message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

#### [TDD - E-DCH Modification:]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the [3.84Mcps TDD - *E-DCH TDD Information* IE] [1.28Mcps TDD - *E-DCH TDD Information LCR* IE] [7.68Mcps TDD - *E-DCH TDD Information 7.68Mcps* IE], then:]

- [3.84Mcps TDD If the *E-DCH TDD Information* IE includes the *E-DCH TDD Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Physical Layer Category LCR* IE or *Extended E-DCH Physical Layer Category LCR* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]

- [7.68Mcps TDD If the *E-DCH TDD Information 7.68Mcps* IE includes the *E-DCH TDD Maximum Bitrate 7.68Mcps* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the [3.84Mcps TDD *E-DCH TDD Information* IE] [7.68Mcps TDD *E-DCH TDD Information* 7.68Mcps IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [TDD If the [3.84Mcps TDD *E-DCH TDD Information* IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] [7.68Mcps TDD *E-DCH TDD Information 7.68Mcps*IE]includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *Maximum Number of Retransmission for Scheduling Info LCR* IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE, then the Node B shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH TDD Information To Modify* IE, then:]

- [TDD If the *E-DCH TDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the Node B shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [TDD If the *E-DCH TDD Information To Modify* IE message includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the Node B shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [1.28Mcps TDD If the *E-DCH TDD Information To Modify* IE message includes the *E-DCH MAC-d Flow Retransmission Timer* IE for an E-DCH MAC-d flow then the Node B shall use this information to set the retransmissions timer.]
- [TDD If the *E-DCH TDD Information To Modify* IE message includes the *E-DCH HARQ Power Offset TDD* IE for an E-DCH MAC-d flow the Node B shall use this new power offset value.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Grant Type* IE, the Node B shall treat the E-DCH MAC-d flow as Scheduled or Non-scheduled accordingly.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the Node B shall use this information to add/delete the indicated logical channels. When a logical channel is deleted, all its associated configuration data shall also removed.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Modify* IE, the Node B shall use this information to modify the indicated logical channels:]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the Node B shall apply the values in the new configuration.]
  - [1.28Mcps TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Maximum Bit Rate LC*R IE, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the Node B shall apply the values in the new configuration.]

- [TDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the Node B shall apply the value in the new configuration.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *MAC-e Reset Indicator* IE in the *E-DCH TDD Information To Modify* IE, then the Node B shall use this value to determine whether MAC-e (or MAC-i) Reset is performed in the UE for sending the HARQ Failure Indication.]

## [1.28Mcps TDD - Power Control GAP:]

[1.28Mcps TDD - If the *Power Control GAP* IE is included in the RADIO LINK RECONFIGURATION REQUEST message, the Node B may use the value for the power control for HS-SCCH and HS-SICH according to the [21].]

#### [1.28Mcps TDD - E-UTRAN Inter-RAT measurement:]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Idle Interval Information* IE, if supported, the Node B shall use the value for E-UTRAN Inter-RAT measurement according to the [18].]

#### [1.28Mcps TDD - HS-DSCH-RNTI for FACH:]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH-RNTI for FACH* IE, if supported, the Node B shall store this information and include the *E-RNTI for FACH* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### General

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IEs in the *HS-DSCH Information* IE, *HS-DSCH Information To Modify Unsynchronised* IE, *HS-DSCH MAC-d Flows To Add* IE, [FDD -*RL Specific E-DCH Information* IE] [TDD - *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information to Modify* IE] or in the *RL Specific DCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

If the requested modifications are allowed by the Node B, the Node B has successfully allocated the required resources, and changed to the new configuration, it shall respond to the CRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

The Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included], or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included], being added or any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1 and in [24], subclause 5.8.3.

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for a DCH or an E-DCH MAC-d flow being added, then the Node B shall not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION RESPONSE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for a DCH or an E-DCH MAC-d flow being added and:]

- [FDD - if the Node B establishes a transport bearer for the concerned DCH or E-DCH MAC-d flow, the Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the DCH or E-DCH MAC-d flow being established.]

- [FDD - if the Node B does not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow, the Node B shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION RESPONSE message.]

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included] in the set of coordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the Node B, the *Transport Layer Address* IE and the *Binding ID* IE [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included] in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

[FDD - In the case of an E-DCH RL being combined with another E-DCH RL within the Node B, the *E-DCH FDD Information Response* IE shall be included only for one of the combined E-DCH RLs.]

In the case of a signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has sent the RADIO LINK RECONFIGURATION RESPONSE message via the old Communication Control Port.

## 8.3.5.3 Unsuccessful Operation

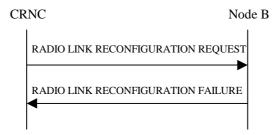


Figure 35: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot allocate the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be set-up, it shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsynchronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s), the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

### **Radio Network Layer Cause**

- CM not supported
- [FDD Continuous Packet Connectivity DTX-DRX operation not available]
- [FDD Continuous Packet Connectivity UE DTX Cycle not available]
- [FDD MIMO not available]
- E-DCH MAC-d PDU Size Format not available
- [FDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD Multi Cell operation not available.]
- [1.28Mcps TDD MIMO not available]
- [1.28Mcps TDD SixtyfourQAM DL and MIMO Combined not available]

#### **Transport Layer Cause**

- Transport Resources Unavailable

#### **Miscellaneous Cause**

- O&M Intervention
- Control processing overload
- HW failure

#### 8.3.5.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

[FDD - If the concerned Node B Communication Context is configured to use DPCH in the downlink and if the *RL Information* IE contains the *DL Code Information* IE and this IE includes *DL Scrambling Code* and *FDD DL Channelisation Code Number* IEs not matching the DL Channelisation code(s) already allocated to the Radio Link identified by *RL ID* IE, then the Node B shall consider the Unsynchronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.]

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD - or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Unsynchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes a *DCHs To Modify* IE or *DCHs To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs To Modify* IE or *DCHs To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-Static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *DL Reference Power* IEs, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the *RL Information* IE includes more than one *DL Reference Power* IEs, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Indexed MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use Maximum MAC-d PDU Size Extended, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use MAC-d PDU Size Index, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Fixed MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use Maximum MAC-d PDU Size Extended, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use MAC-d PDU Size List, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *HS-DSCH Information* IE and if the *Measurement Power Offset* IE is not present, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION REQUEST message includes *HS-DSCH Information* IE and the HS-DSCH is already configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the concerned Node B Communication Context is configured to use F-DPCH in the downlink and if the *RL Information* IE contains the *DL Code Information* IE, then the Node B shall consider the Unsynchronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.]

[FDD - If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION REQUEST message, but the *E-DPCH Information* IE is not present, or if any of the *Maximum Set of E-DPDCHs* IE, *Puncture Limit* IE, *E-TFCS Information* IE, *E-TTI* IE, *E-DPCCH Power Offset* IE, *E-RGCH 2-Index-Step Threshold* IE, *E-RGCH 3-Index-Step Threshold* IE, *HARQ Info for E-DCH* IE or *HS-DSCH Configured Indicator* IE are not present in the *E-DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If any the *HS-DSCH Configured Indicator* IE, of the *Maximum Set of E-DPDCHs* IE, *Puncture Limit* IE or *E-TTI* IE are present in the *E-DPCH Information* IE and the *E-DCH FDD Information* IE is not present in the RADIO LINK RECONFIGURATION REQUEST message, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes one of the *Not Used* IEs, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH RL Indication* IE set to "E-DCH", but no *E-DCH FDD Information* IE, and the Node B Communication Context is not configured for E-DCH, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information* IE but no *E-DCH RL Indication* IE set to "E-DCH", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *HS-PDSCH RL ID* IE and/or the *Serving E-DCH RL* IE and if both HS-DSCH and E-DCH are configured in the new configuration but the Serving HS-DSCH

Radio Link and the Serving E-DCH Radio Link are not in the same cell then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *HS-PDSCH RL ID* IE and the *E-DPCH Information* IE which includes the *HS-DSCH Configured Indicator* IE set as 'HS-DSCH not configured' then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE or *E-DCH MAC-d Flows To Delete* IE in addition to the *E-DCH FDD Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE, *E-DCH MAC-d Flows To Delete* IE and the Node B Communication Context is not configured for E-DCH, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information To Modify* IE deleting the last remaining E-DCH Logical Channel of an E-DCH MAC-d Flow, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes *E-DCH FDD Information* IE and the E-DCH is already configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[TDD - if the radio link was not previously configured to support E-DCH, then if the RADIO LINK RECONFIGURATION REQUEST message includes one of the following E-DCH information elements then it shall contain all of them otherwise the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.: *E-DCH Serving RL* IE, [3.84Mcps TDD and 7.68Mcps - *E-PUCH Information* IE, *E-TFCS Information TDD* IE], [1.28Mcps TDD - *E-PUCH Information LCR* IE, *E-TFCS Information TDD* IE], *E-DCH MAC-d Flows to Add* IE, and [3.84Mcps TDD - *E-DCH TDD Information* IE] [1.28Mcps TDD - *E-DCH TDD Information TOD IE*], [1.68Mcps TDD - *E-DCH TDD Information TOD IE*].

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE in addition to the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE in addition to the *Continuous Packet Connectivity HS-SCCH less Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE while the Continuous Packet Connectivity HS-SCCH less configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity *DTX-DRX* configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *DRX Information To Modify* IE in *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity DRX configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only" but no *Transport Format Set* IE for the uplink for this DCH and the Node B had ignored the configuration of Transport Format Set for uplink, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only" but no *Transport Format Set* IE for the downlink for this DCH and the Node B had ignored the

configuration of Transport Format Set for downlink, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Bearer Not Requested Indicator* IE for a DCH but does not contain the corresponding *DCH ID* IE and the *Unidirectional DCH indicator* IE set to "Uplink DCH only" for the DCH in *DCH Information To Add* IE, the Node B shall reject the procedure using the the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the concerned Node B Communication Context is configured to apply UL DPCCH Slot Format 0 or 2 and execute Continuous Packet Connectivity DTX-DRX operation, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the concerned Node B Communication Context is configured to apply MIMO, allowed to apply 64 QAM or establish the secondary serving HS-DSCH Radio Link but is not configured to use flexible MAC-d PDU Size, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message contains a *MIMO Activation Indicator* IE and an *Additional HS Cell Information RL Reconf Req* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message contains an *Additional HS Cell Information RL Reconf Req* IE and the concerned Node B Communication Context is configured to apply MIMO, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH in the *RL Specific DCH Information* IE but does not include the *DCH ID* IE for the DCH in the *DCHs to Add* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message contains the *Continuous Packet Connectivity DTX-DRX Information* IE but the concerned Node B Communication Context is not previously configured to use F-DPCH, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the concerned Node B Communication Context is configured to have the Serving E-DCH Radio Link but there is at least one E-DCH MAC-d flow which the Transport Bearer is not configured in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH for a specific RL and the specific RL is combined with existing RL which the transport bearer is established for the DCH in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- If ALCAP is not used, if the concerned Node B Communication Context is configured to establish a DCH, an E-DCH MAC-d flow and/or an HS-DSCH MAC-d flow but the RADIO LINK RECONFIGURATION REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE for the DCH, the E-DCH MAC-d flow and/or HS-DSCH MAC-d flow, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.
- [1.28 Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Semi-Persistent scheduling Information to Modify LCR* IE in addition to the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [1.28 Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Semi-Persistent scheduling Information to Modify LCR* IE in addition to the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- If, in the new configuration, there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use 'Flexible RLC PDU Size' for an HS-DSCH but is not configured to use Maximum MAC-d PDU Size Extended, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.
- If, in the new configuration, the concerned Node B Communication Context is configured to use MAC-d PDU Size Index for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use

'Flexible RLC PDU Size', the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH FDD Secondary Serving Information* IE but does not contain the *C-ID* IE in the *Additional HS Cell Information RL Reconf Prep* IE or the message includes the *C-ID* IE but does not contain the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Reconf Prep* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

### 8.3.6 Radio Link Deletion

#### 8.3.6.1 General

The Radio Link Deletion procedure is used to release the resources in a Node B for one or more established radio links towards a UE.

The Radio Link Deletion procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

## 8.3.6.2 Successful Operation

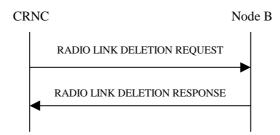


Figure 36: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon receipt of this message, the Node B shall delete the radio link(s) identified by the *RL ID* IE, *Node B Communication Context ID* IE and *CRNC Communication Context ID* IE and release all associated resources and respond to the CRNC with a RADIO LINK DELETION RESPONSE message.

[FDD - After deletion of the RL(s), the UL out-of-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters N\_OUTSYNC\_IND and T\_RLFAILURE that are configured in the cells supporting the radio links of the RL Set and the UL in-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the minimum value of the parameters N\_INSYNC\_IND that are configured in the cells supporting the radio links of the RL Set.]

[FDD – If the RL indicated by the *RL ID* IE in the RADIO LINK DELETION REQUEST message is the serving HS-DSCH Radio link and a related secondary serving HS-DSCH Radio Link exists in the Node B, the Node B shall delete the secondary serving HS-DSCH Radio Link.]

[FDD – If the RL indicated by the *RL ID* IE in the RADIO LINK DELETION REQUEST message is the secondary serving HS-DSCH Radio link, the Node B shall delete the secondary serving HS-DSCH Radio Link.]

## 8.3.6.3 Unsuccessful Operation

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#### 8.3.6.4 Abnormal Conditions

If the RL indicated by the *RL ID* IE, *Node B Communication Context ID* IE and *CRNC Communication Context ID* IE does not exist, the Node B shall respond with the RADIO LINK DELETION RESPONSE message and use the *CRNC Communication Context ID* IE received in the RADIO LINK DELETION REQUEST message.

# 8.3.7 Downlink Power Control [FDD]

### 8.3.7.1 General

The purpose of this procedure is to balance the DL transmission powers of one or more Radio Links used for the related UE-UTRAN connection within the Node B. The Downlink Power Control procedure may be initiated by the CRNC at any time when the Node B Communication Context exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this Node B Communication Context. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Control procedure shall no longer be initiated.

### 8.3.7.2 Successful Operation



Figure 37: Downlink Power Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER CONTROL REQUEST message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The *Power Adjustment Type* IE defines the characteristic of the power adjustment.

If the value of the *Power Adjustment Type* IE is "Common", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Common". As long as the Power Balancing Adjustment Type of the Node B Communication Context is set to "Common", the Node B shall perform the power adjustment (see below) for all existing and future radio links associated with the context identified by the *Node B Communication Context ID* IE and use a common DL reference power level.

If the value of the *Power Adjustment Type* IE is "Individual", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Individual". The Node B shall perform the power adjustment (see below) for all radio links addressed in the message using the given DL Reference Powers per RL. If the Power Balancing Adjustment Type of the Node B Communication Context was set to "Common" before this message was received, power balancing on all radio links not addressed by the DL POWER CONTROL REQUEST message shall remain to be executed in accordance with the existing power balancing parameters which are now considered RL individual parameters. Power balancing will not be started on future radio links without a specific request.

If the value of the *Power Adjustment Type* IE is "None", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "None" and the Node B shall suspend on going power adjustments for all radio links for the Node B Communication Context.

If the *Inner Loop DL PC Status* IE is present and set to "Active", the Node B shall activate inner loop DL power control for all radio links for the Node B Communication Context. If the *Inner Loop DL PC Status* IE is present and set to "Inactive", the Node B shall deactivate inner loop DL power control for all radio links for the Node B Communication Context according to ref. [10].

#### **Power Adjustment**

The power balancing adjustment shall be superimposed on the inner loop power control adjustment (see ref. [10]) if activated. The power balancing adjustment shall be such that:

$$\sum P_{bal} = (1 - r)(P_{ref} + P_{P-CPICH} - P_{init})$$
 with an accuracy of  $\pm 0.5$  dB

where the sum is performed over an adjustment period corresponding to a number of frames equal to the value of the *Adjustment Period* IE,  $P_{ref}$  is the value of the *DL Reference Power* IE,  $P_{P-CPICH}$  is the power used on the primary CPICH,  $P_{init}$  is the code power of the last slot of the previous adjustment period and r is given by the *Adjustment Ratio* IE. If the last slot of the previous adjustment period is within a transmission gap due to compressed mode,  $P_{init}$  shall be set to the same value as the code power of the slot just before the transmission gap.

The adjustment within one adjustment period shall in any case be performed with the constraints given by the *Max Adjustment Step* IE and the DL TX power range set by the CRNC.

The power adjustments shall be started at the first slot of a frame with CFN modulo the value of *Adjustment Period* IE equal to 0 and shall be repeated for every adjustment period and shall be restarted at the first slot of a frame with CFN=0, until a new DL POWER CONTROL REQUEST message is received or the RL is deleted.

#### 8.3.7.3 Abnormal Conditions

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## 8.3.8 Dedicated Measurement Initiation

#### 8.3.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on dedicated resources in a Node B.

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1 except when the *Node B Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message is set to the reserved value "All NBCC".

If the *Node B Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message is set to the reserved value "All NBCC", the Dedicated Measurement Initiation procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

# 8.3.8.2 Successful Operation

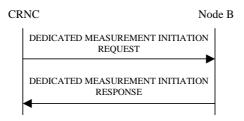


Figure 38: Dedicated Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the Node B Communication Context.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the DEDICATED MEASUREMENT INITIATION REQUEST message. Unless specified below the meaning of the parameters are given in other specifications.

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", this measurement request shall apply for all current and future Node B Communication Contexts controlled via the Communication Control Port on which the DEDICATED MEASUREMENT INITIATION REQUEST message was received. Otherwise, this measurement request shall apply for the requested Node B Communication Context ID only.

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", the measurement request shall be treated as a single measurement, despite applying to multiple contexts. This means that it may only be terminated or failed on "All NBCC".

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", the measurement shall be initiated only for those Node B Communication Contexts handling a mode (FDD, 3.84Mcps TDD, 7.68Mcps TDD or 1.28Mcps TDD) for which the concerned measurement is specified in [4] and [5]. The initiation of the measurement for a Node B Communication Context may be delayed until the Reconfiguration CFN has elapsed if either a Prepared Reconfiguration exists or a Prepared Reconfiguration no longer exists but the Reconfiguration CFN has not yet elapsed.

If the Dedicated Measurement Object Type is indicated as being "RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Links.

[FDD - If the Dedicated Measurement Object Type is indicated as being "RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Link Sets.]

[FDD - If the Dedicated Measurement Object Type is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all current and future Radio Links within the Node B Communication Context.]

[TDD - If the Dedicated Measurement Object Type is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for one existing DPCH per CCTrCH in each used time slot of current and future Radio Links within the Node B Communication Context, provided the measurement type is applicable to the respective DPCH.]

[FDD - If the Dedicated Measurement Object Type is indicated as being "ALL RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all existing and future Radio Link Sets within the Node B Communication Context.]

[TDD - If the *DPCH ID* IE or *DPCH ID 7.68Mcps* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE, *HS-SICH ID* IE, *DPCH ID 7.68Mcps* IE and no *PUSCH Information* IE is provided within the RL Information, the measurement request shall apply for one existing physical channel per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this physical channel.]

[TDD - If the *PUSCH Information* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually.]

[TDD - If the *HS-SICH Information* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually.]

[TDD - If the *Dedicated Measurement Type* IE is set to "HS-SICH reception quality", the Node B shall initiate measurements of the failed, missed and total HS-SICH transmissions on all of the HS-SICH assigned to this Node B Communication Context. If either the failed or missed HS-SICH transmission satisfies the requested report characteristics, the Node B shall report the result of both failed and missed transmission measurements along with the total number of transmissions.]

If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the DEDICATED MEASUREMENT REPORT message or in the DEDICATED MEASUREMENT INITIATION RESPONSE message, the latter only in the case the *Report Characteristics* IE is set to "On Demand". The reported CFN shall be the CFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

[FDD - If the *Number Of Reported Cell Portions* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message, the value shall be used to determine how many *Cell Portion ID* IEs and *SIR Value* IEs shall be included in *Best Cell Portions* IE in the DEDICATED MEASUREMENT REPORT message or in the DEDICATED MEASUREMENT INITIATION RESPONSE message.]

#### Report characteristics

The Report Characteristics IE indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to "On Demand" and if the *CFN* IE is not provided, the Node B shall return the result of the measurement immediately. If the *CFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to "Periodic", the Node B shall periodically initiate the Dedicated Measurement Report procedure for this measurement, with the requested report frequency. If the *CFN* IE is provided, it indicates the

frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to "Event A", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event B", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event C", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising time specified by the *Measurement Change Time* IE has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "Event D", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the falling time specified by the *Measurement Change Time* IE has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "Event E", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the Node B shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "Event F", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the Node B shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to "On Demand", the Node B is required to perform reporting for a dedicated measurement object, in accordance with the conditions provided in the DEDICATED MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no dedicated measurement object for which a measurement is defined exists anymore, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Dedicated Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

#### Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows

 $F_n$  is the updated filtered measurement result

 $F_{n-1}$  is the old filtered measurement result

 $M_n$  is the latest received measurement result from physical layer measurements, the unit used for  $M_n$  is the same unit as the reported unit in the DEDICATED MEASUREMENT INITIATION RESPONSE, DEDICATED MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for Fn)

 $a = 1/2^{(k/2)}$ , where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter,  $F_0$  is set to  $M_I$  when the first measurement result from the physical layer measurement is received.

#### **Measurement Recovery Behavior:**

If the *Measurement Recovery Behavior* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall, if Measurement Recovery Behavior is supported, include the *Measurement Recovery Support Indicator* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE message and perform the Measurement Recovery Behavior as described in subclause 8.3.9.2.

#### Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message using the Communication Control Port assigned to the Node B Communication Context. The message shall include the same Measurement ID that was used in the measurement request. The DEDICATED MEASUREMENT INITIATION RESPONSE message shall be sent even if the initiation is delayed for some Node B Communication Contexts due to an existing Prepared Reconfiguration or that the Reconfiguration CFN has not yet elapsed.

Only in the case where the *Report Characteristics* IE is set to "On Demand", the DEDICATED MEASUREMENT INITIATION RESPONSE message shall include the *Dedicated Measurement Object Type* IE containing the measurement result. [TDD - In the case that the measurement was performed on a particular HS-SICH, the Node B shall include the *HS-SICH ID* IE that indicates which HS-SICH was measured.]

In the case where the *Node B Communication Context ID* IE is set to "All NBCC", the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE shall be set to the value "All CRNCCC", which is reserved for this purpose.

[FDD - If the *Alternative Format Reporting Indicator* IE is set to "Alternative format is allowed" in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B may include the *Extended Round Trip Time* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE message.]

#### **Interaction with Reset Procedure:**

If a measurement has been requested with the *Node B Communication Context ID* IE set to "All NBCC", the Node B shall terminate the measurement locally if either the CRNC or the Node B initiates the Reset procedure for the relevant Communication Control Port or the entire Node B.

## 8.3.8.3 Unsuccessful Operation

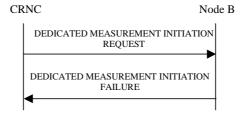


Figure 39: Dedicated Measurement Initiation procedure: Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a DEDICATED MEASUREMENT INITIATION FAILURE message using the Communication Control Port assigned to the Node B Communication Context. The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

In the case where the *Node B Communication Context ID* IE is set to "All NBCC" the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION FAILURE shall be set to the value "All CRNCCC", which is reserved for this purpose.

Typical cause values are as follows:

#### Radio Network Layer cause

- Measurement not supported for the object
- Measurement Temporarily not Available

#### **Miscellaneous Cause**

- O&M Intervention
- Control processing overload
- HW failure

### 8.3.8.4 Abnormal Conditions

The allowed combinations of the Dedicated Measurement Type and Report Characteristics Type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

Table 4: Allowed Dedicated Measurement Type and Report Characteristics Type combinations

Dedicated	Report Characteristics Type									
Measurement Type	On Demand	Periodic				Event D		Event F	On Modification	
SIR	Χ	Х	Х	Х	Х	Х	Х	Х		
SIR Error	X	Х	Х	Х	Х	Х	Х	Χ		
Transmitted Code Power	Х	Х	Х	Х	Х	Х	Х	Х		
RSCP	Х	Х	Х	Х	Х	Х	Х	Χ		
Rx Timing Deviation	X	Х	Χ	Х			Х	Χ		
Round Trip Time	X	Х	Χ	Х	Х	Х	Х	Χ		
Rx Timing Deviation LCR	Х	Х	Х	Х			Х	Х		
HS-SICH reception quality	Х	Х	Х	Х			Х	Х		
Best Cell Portions	X	Х								
Angle Of Arrival LCR	X	Х								
Rx Timing Deviation 7.68Mcps	Х	Х	Х	Х			Х	Х		
Rx Timing Deviation 3.84Mcps Extended	Х	Х	Х	Х			Х	Х		

If the Dedicated Measurement Type received in the *Dedicated Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Dedicated Measurement Object Type received in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

If the *CFN* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Report Characteristics* IE is other than "Periodic" or "On Demand", the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

# 8.3.9 Dedicated Measurement Reporting

#### 8.3.9.1 General

This procedure is used by the Node B to report the result of measurements requested by the CRNC with the Dedicated Measurement Initiation procedure. The Node B may initiate the Dedicated Measurement Reporting procedure at any time after establishing a Radio Link, as long as the Node B Communication Context exists.

### 8.3.9.2 Successful Operation



Figure 40: Dedicated Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Dedicated Measurement Reporting procedure. The DEDICATED MEASUREMENT REPORT message shall use the Communication Control Port assigned to the Node B Communication Context. If the measurement was initiated (by the Dedicated Measurement Initiation procedure) for multiple dedicated measurement objects, the Node B may include measurement values for multiple objects in the DEDICATED MEASUREMENT REPORT message. Unless specified below, the meaning of the parameters are given in other specifications.

The *Measurement ID* IE shall be set to the Measurement ID provided by the CRNC when initiating the measurement with the Dedicated Measurement Initiation procedure.

[TDD - In the case that the measurement was performed on a particular HS-SICH, the Node B shall include the *HS-SICH ID* IE that indicates which HS-SICH was measured.]

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]) or the measurement is temporarily not available in case Measurement Recovery Behavior is supported, the Measurement not available shall be reported. If the Node B was configured to perform the Measurement Recovery Behavior, the Node B shall indicate Measurement Available to the CRNC when the achieved measurement accuracy again fulfils the given accuracy requirement (see ref. [22] and [23]) and include the *Measurement Recovery Report Indicator* IE in the DEDICATED MEASUREMENT REPORT message if the requested measurement reporting criteria are not met.

[FDD - If the *Alternative Format Reporting Indicator* IE was set to "Alternative format is allowed" in the DEDICATED MEASUREMENT INITIATION REQUEST message setting up the measurement to be reported, the Node B may include the *Extended Round Trip Time* IE in the DEDICATED MEASUREMENT REPORT message.]

#### 8.3.9.3 Abnormal Conditions

# 8.3.10 Dedicated Measurement Termination

## 8.3.10.1 General

This procedure is used by the CRNC to terminate a measurement previously requested by the Dedicated Measurement Initiation procedure.

The Dedicated Measurement Termination procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1 except if the measurement was initiated by the Dedicated Measurement Initiation procedure using the reserved value "All NBCC".

If the measurement was initiated by the Dedicated Measurement Initiation procedure using the reserved value "All NBCC", the Dedicated Measurement Termination procedure may be initiated by the CRNC at any time.

## 8.3.10.2 Successful Operation



Figure 41: Dedicated Measurement Termination procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT TERMINATION REQUEST message, sent from the CRNC to the Node B using the Communication Control Port assigned to the Node B Communication Context.

Upon reception, the Node B shall terminate reporting of dedicated measurements corresponding to the received *Measurement ID* IE.

#### 8.3.10.3 Abnormal Conditions

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# 8.3.11 Dedicated Measurement Failure

#### 8.3.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Dedicated Measurement Initiation procedure can no longer be reported. The Node B is allowed to initiate the DEDICATED MEASUREMENT FAILURE INDICATION message at any time after having sent the RADIO LINK SETUP RESPONSE message, as long as the Node B Communication Context exists.

#### 8.3.11.2 Successful Operation



Figure 42: Dedicated Measurement Failure procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT FAILURE INDICATION message, sent from the Node B to the CRNC using the Communication Control Port assigned to the Node B Communication Context, to inform the CRNC that a previously requested measurement can no longer be reported. The Node B has locally terminated the indicated measurement.

If the failed measurement was initiated with the *Node B Communication Context ID* IE set to the reserved value "All NBCC" and the Node B has terminated the measurement reporting of the measurement corresponding to the Measurement ID indicated in the DEDICATED MEASUREMENT FAILURE INDICATION message, the *CRNC Communication Context ID* IE shall be set to the value "All CRNCCC".

## 8.3.11.3 Abnormal Conditions

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## 8.3.12 Radio Link Failure

#### 8.3.12.1 General

This procedure is used by the Node B to indicate a failure in one or more Radio Links [FDD - or Radio Link Sets][TDD or CCTrCHs within a Radio Link].

The Node B may initiate the Radio Link Failure procedure at any time after establishing a Radio Link.

## 8.3.12.2 Successful Operation



Figure 43: Radio Link Failure procedure, Successful Operation

When the Node B detects that one or more Radio Link(s) [FDD - or Radio Link Set(s)] [TDD - or CCTrCHs within a Radio Link] are no longer available, it sends the RADIO LINK FAILURE INDICATION message to the CRNC indicating the failed Radio Link(s) or Radio Link Set(s) or CCTrCHs with the most appropriate cause values in the *Cause* IE. The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.

If the failure concerns one or more individual Radio Link(s), the Node B shall indicate the affected Radio Link(s) using the *RL Information* IE. [FDD - If the failure concerns one or more Radio Link Set(s), the Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information* IE.] [TDD - If the failure concerns only the failure of one or more CCTrCHs within a radio link, the Node B shall indicate the affected CCTrCHs using the *CCTrCH ID* IE.]

When the Radio Link Failure procedure is used to notify the loss of UL synchronisation of a [FDD - Radio Link Set] [TDD - Radio Link or CCTrCHs within a Radio Link] on the Uu interface, the RADIO LINK FAILURE INDICATION message shall be sent, with the *Cause* IE set to "Synchronisation Failure", when indicated by the UL out-of-sync algorithm defined in [10] and [21]. [FDD - The algorithms in [10] shall use the maximum value of the parameters N\_OUTSYNC\_IND and T\_RLFAILURE, and the minimum value of the parameters N\_INSYNC\_IND, that are configured in the cells supporting the radio links of the RL Set.]

[FDD - When the Radio Link Failure procedure is used to indicate permanent failure in one or more Radio Link(s) / Radio Link Set(s) due to the occurrence of an UL or DL frame with more than one transmission gap caused by one or more compressed mode pattern sequences, the DL transmission shall be stopped and the RADIO LINK FAILURE INDICATION message shall be sent with the cause value "Invalid CM Settings". After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link(s)/Radio Link Set(s) from the Node B Communication Context or the Node B Communication Context itself.]

[FDD - When the Radio Link Failure Procedure is used to indicate E-DCH non serving cell processing issue, the RADIO LINK FAILURE INDICATION shall be sent, with the *Cause* IE set to "Not enough user plane processing resources".]

In the other cases, the Radio Link Failure procedure is used to indicate that one or more Radio Link(s)/Radio Link Set(s) are permanently unavailable and cannot be restored. After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link/Radio Link Set from the Node B Communication Context or the Node B Communication Context itself. When applicable, the retention priorities associated with the transport channels shall be used by the Node B to prioritise which Radio Link(s)/Radio Link Set(s) to indicate as unavailable to the CRNC.

Typical cause values are:

#### **Radio Network Layer Causes:**

- Synchronisation Failure
- Invalid CM settings

#### **Transport Layer Causes:**

- Transport Resources Unavailable

#### **Miscellaneous Causes:**

- Control Processing Overload
- HW Failure
- O&M Intervention
- Not enough user plane processing resources

## 8.3.12.3 Abnormal Conditions

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## 8.3.13 Radio Link Restoration

#### 8.3.13.1 General

This procedure is used by the Node B to notify the achievement and re-achievement of uplink synchronisation of one or more [FDD - Radio Link Sets][TDD - Radio Links or CCTrCHs within a Radio Link] on the Uu interface.

The Node B may initiate the Radio Link Restoration procedure at any time after establishing a Radio Link.

## 8.3.13.2 Successful Operation

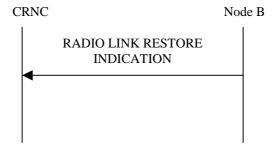


Figure 44: Radio Link Restoration procedure, Successful Operation

The Node B shall send the RADIO LINK RESTORE INDICATION message to the CRNC when indicated by the UL synchronisation detection algorithm defined in ref. [10] and [21] [FDD -, or when the *Fast Reconfiguration Mode* IE has been included in the RADIO LINK RECONFIGURATION COMMIT message and the Node B has detected that the UE has changed to the new configuration. The algorithm in ref. [10] shall use the minimum value of the parameters N\_INSYNC\_IND that are configured in the cells supporting the radio links of the RL Set.] The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.

[TDD - If the re-established Uu synchronisation concerns one or more individual Radio Links, the Node B shall indicate the affected Radio Link(s) using the *RL Information* IE.] [TDD - If the re-established Uu synchronisation concerns one or more individual CCTrCHs within a radio link, the Node B shall indicate the affected CCTrCHs using the *CCTrCH ID* IE.] [FDD - If the re-established Uu synchronisation concerns one or more Radio Link Set(s), the Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information* IE.]

[FDD - The Node B shall send the RADIO LINK RESTORE INDICATION message when the E-DCH processing issue condition has ceased.]

#### 8.3.13.3 Abnormal Condition

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# 8.3.14 Compressed Mode Command [FDD]

## 8.3.14.1 General

The Compressed Mode Command procedure is used to activate or deactivate the compressed mode in the Node B for one Node B Communication Context.

The Compressed Mode Command procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

## 8.3.14.2 Successful Operation



Figure 47: Compressed Mode Command procedure, Successful Operation

The procedure is initiated by the CRNC sending a COMPRESSED MODE COMMAND message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CM Configuration Change CFN* IE requested by the CRNC when receiving the COMPRESSED MODE COMMAND message from the CRNC. From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions (if present) shall be started when the indicated *TGCFN* IE elapses. The *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value.

If the values of the *CM Configuration Change CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CM Configuration Change CFN* IE.

If the concerned Node B Communication Context is configured to use F-DPCH in the downlink, the Node B shall not transmit the F-DPCH during the downlink transmission gaps according to [7]. But in all slots outside of the downlink transmission gaps the NodeB shall transmit the F-DPCH with the normal scrambling code and the assigned slot format, regardless of the configured downlink compressed mode method information and of the transmission gap pattern sequence code information, if existing..

### 8.3.14.3 Abnormal Conditions

[FDD – If the concerned Node B Communication Context is not configured to use F-DPCH in the downlink and if a transmission gap pattern sequence is activated with an SF/2 downlink compressed mode method and for any Radio Link the transmission gap pattern sequence code information is not available, the NodeB shall trigger the Radio Link Failure procedure with the cause value "Invalid CM Settings'.]

# 8.3.15 Downlink Power Timeslot Control [TDD]

### 8.3.15.1 General

The purpose of this procedure is to enable the Node B to use the indicated DL Timeslot ISCP values when deciding the DL TX Power for each timeslot.

The Downlink Power Timeslot Control procedure can be initiated by the CRNC at any time when the Node B Communication Context exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this

Node B Communication Context. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Timeslot Control procedure shall no longer be initiated.

## 8.3.15.2 Successful Operation



Figure 47A: Downlink Power Timeslot Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER TIMESLOT CONTROL REQUEST message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon reception, the Node B shall use the indicated DL Timeslot ISCP value when deciding the DL TX Power for each timeslot as specified in ref. [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged.

If the *Primary CCPCH RSCP Delta* IE is included, the Node B shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per [23], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the Node B shall assume that the reported value is in the non-negative range as per [23], and the value is equal to the *Primary CCPCH RSCP* IE. The Node B should use the indicated value for HS-DSCH scheduling and transmit power adjustment.

#### 8.3.15.3 Abnormal Conditions

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# 8.3.16 Radio Link Pre-emption

# 8.3.16.1 General

This procedure is started by the Node B when resources need to be freed.

The Node B may initiate the Radio Link Pre-emption procedure at any time after establishing a Radio Link.

#### 8.3.16.2 Successful Operation

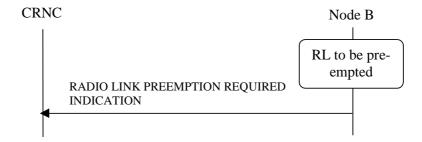


Figure 47B: Radio Link Pre-emption procedure, Successful Operation

When the Node B detects that a one or more Radio Links should be pre-empted (see Annex A), it shall send the RADIO LINK PREEMPTION REQUIRED INDICATION message to the CRNC using the Communication Control Port assigned to the concerned Node B Communication Context.

If all Radio Links for a CRNC Communication Context ID should be pre-empted, the *RL Information* IE shall be omitted. If one or several but not all Radio Links should be pre-empted for a CRNC Communication Context, the Radio

Links that should be pre-empted shall be indicated in the *RL Information* IE. The Radio Link(s) that should be pre-empted should be deleted by the CRNC.

#### 8.3.16.3 Abnormal Conditions

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# 8.3.17 Bearer Re-arrangement

### 8.3.17.1 General

This procedure is started by the Node B when Bearers for the Node B Communication Context need to be rearranged.

The Node B may initiate the Bearer Rearrangement procedure at any time after establishing a Radio Link.

### 8.3.17.2 Successful Operation



Figure 47C: Bearer Re-arrangement Indication, Successful Operation

When the Node B detects that a signaling bearer or a transport bearer or both need to be re-arranged for the Node B Communication Context, it shall send the BEARER REARRANGEMENT INDICATION message to the CRNC. The message shall use the Communication Control Port assigned for this Node B Communication Context.

If the signaling bearer for the control of the Node B Communication Context needs to be rearranged, the *Signalling Bearer Requested Indicator* IE shall be included in the BEARER REARRANGEMENT INDICATION message.

If the transport bearer for a transport channel needs to be rearranged, the ID of the transport channel for which a new transport bearer is required, shall be included in the BEARER REARRANGEMENT INDICATION message.

## 8.3.17.3 Abnormal Conditions

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## 8.3.18 Radio Link Activation

#### 8.3.18.1 General

This procedure is used to activate or de-activate the DL transmission on the Uu interface regarding selected RLs.

## 8.3.18.2 Successful Operation



Figure 47D: Radio Link Activation procedure

This procedure is initiated by sending the RADIO LINK ACTIVATION COMMAND message from the CRNC to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context. Upon reception, the Node B shall for each concerned RL:

- if the *Delayed Activation Update* IE indicates "Activate":
  - if the *Activation Type* IE equals "Unsynchronised":
    - [FDD start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].]
    - [TDD start transmission on the new RL immediately as specified in [16].]
  - if the *Activation Type* IE equals "Synchronised":
    - [FDD start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
    - [TDD start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in [16].]
  - [FDD the Node B shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH or on the F-DPCH of the RL when starting transmission until either UL synchronisation on the Uu interface is achieved for the RLS or power balancing is activated. During this period no inner loop power control shall be performed and, unless activated by the DL POWER CONTROL REQUEST message, no power balancing shall be performed. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and downlink power balancing adjustments (see subclause 8.3.7).]
  - [TDD the Node B shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH and on each Time Slot of the RL when starting transmission until the UL synchronisation on the Uu interface is achieved for the RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]
  - [FDD if the *Propagation Delay* IE and optionally the *Extended Propagation Delay* IE are included, the Node B may use this information to speed up the detection of UL synchronisation on the Uu interface.]
  - [FDD if the *First RLS Indicator* IE is included, it indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC Pattern 01 Count* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]
- if the *Delayed Activation Update* IE indicates "Deactivate":
  - stop DL transmission immediately, if the *Deactivation Type* IE equals "Unsynchronised", or at the CFN indicated by the *Deactivation CFN* IE, if the *Deactivation Type* IE equals "Synchronised".

#### 8.3.18.3 Abnormal Conditions

[FDD - If the *Delayed Activation Update* IE is included in the RADIO LINK ACTIVATION COMMAND message, it indicates "Activate" and the *First RLS Indicator* IE is not included, the Node B shall initiate the Error Indication procedure.]

# 8.3.19 Radio Link Parameter Update

#### 8.3.19.1 General

The Radio Link Parameter Update procedure is excuted by the Node B when the update of HS-DSCH [FDD - or E-DCH] related radio link parameter values are needed on the Node B side. With this procedure, Node B can suggest some HS-DSCH [FDD - or E-DCH] related Radio Link Parameter values to RNC.

The Radio Link Parameter Update procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

## 8.3.19.2 Successful Operation



Figure 48: Radio Link Parameter Update Indication, Successful Operartion

The Node B initiates the Radio Link Parameter Update procedure by sending the RADIO LINK PARAMETER UPDATE INDICATION message to the CRNC. The message contains suggested value(s) of the HS-DSCH [FDD - or E-DCH] related parameter(s) that should be reconfigured on the radio link(s).

If the Node B needs to update HS-DSCH related parameters, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including [FDD - HS-DSCH FDD Update Information IE] [TDD - HS-DSCH TDD Update Information IE].

If the Node B needs to allocate new HS-SCCH Codes, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-SCCH Code Change Indicator* IE.

[FDD - If the Node B needs to allocate new HS-PDSCH Codes, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-PDSCH Code Change Indicator* IE.]

[FDD - If the Node B needs to update the CQI Feedback Cycle k, CQI Repetition Factor, ACK-NACK Repetition Factor, CQI Power Offset, ACK Power Offset and/or NACK Power Offset, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *CQI Feedback Cycle k* IE, *CQI Repetition Factor* IE, *ACK NACK Repetition Factor* IE, *CQI Power Offset* IE, *ACK Power Offset* IE and/or *NACK Power Offset* IE.]

[FDD - If the Node B needs to update Secondary Serving HS-DSCH related parameters, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Additional HS Cell Information RL Param Upd* IE.]

- [FDD - If the Node B needs to allocate new secondary serving HS-SCCH Codes, the Node B shall include the HS-SCCH Code Change Indicator IE in the HS-DSCH FDD Secondary Serving Update Information IE.]

[TDD - If the Node B needs to update the TDD ACK-NACK Power Offset the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including TDD ACK-NACK Power Offset IE.]

[FDD - If the Node B needs to update E-DCH related parameters, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including the *E-DCH FDD Update Information* IE.]

[FDD - If the Node B needs to update the HARQ process allocation for non-scheduled transmission and/or HARQ process allocation for scheduled Transmission, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including the *HARQ Process Allocation For 2ms Non-Scheduled Transmission* Grant IE for the concerned MAC-d Flows and/or *HARQ Process Allocation For 2ms Scheduled Transmission* Grant IE.]

[FDD - If the Node B needs to allocate new E-AGCH Channelisation Code, new E-RGCH/E-HICH Channelisation Code, new E-RGCH Signature Sequence and/or new E-HICH Signature Sequence, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *E-DCH DL Control Channel Change Information* IE.]

#### 8.3.19.3 Abnormal Conditions

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# 8.4 Error Handling Procedures

## 8.4.1 Error Indication

### 8.4.1.1 General

The Error Indication procedure is initiated by a node in order to report detected errors in one incoming message, provided they cannot be reported by an appropriate response message.

# 8.4.1.2 Successful Operation

When the conditions defined in subclause 10 are fulfilled, the Error Indication procedure is initiated by an ERROR INDICATION message sent from the receiving node.

In case the Error Indication procedure was triggered by a dedicated procedure, the following applies:

- When the ERROR INDICATION message is sent from a Node B to its CRNC, the *CRNC Communication Context ID* IE shall be included in the message if the corresponding Node B Communication Context, addressed by the *Node B Communication Context ID* IE which was received in the message triggering the Error Indication procedure, exists;
- When the ERROR INDICATION message is sent from a CRNC to a Node B, the *Node B Communication Context ID* IE shall be included in the message if the corresponding CRNC Communication Context, addressed by the *CRNC Communication Context ID* IE which was received in the message triggering the Error Indication procedure, exists;
- When the message triggering the Error Indication procedure is received in the Node B and there is no Node B Communication Context as indicated by the *Node B Communication Context ID* IE, the Node B shall include the unknown *Node B Communication Context ID* IE from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.
- When the message triggering the Error Indication procedure is received in the CRNC and there is no CRNC Communication Context as indicated by the *CRNC Communication Context ID* IE, the CRNC shall include the unknown *CRNC Communication Context ID* IE from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

The ERROR INDICATION message shall include either the *Cause* IE, or the *Criticality Diagnostics* IE or both the *Cause* IE and the *Criticality Diagnostics* IE.

Typical cause values for the ERROR INDICATION message are:

#### **Protocol Causes:**

- Transfer Syntax Error
- Abstract Syntax Error (Reject)
- Abstract Syntax Error (Ignore and Notify)
- Message not Compatible with Receiver State
- Unspecified



Figure 49: Error Indication procedure (Node B to CRNC): Successful Operation



Figure 50: Error Indication procedure (CRNC to Node B), Successful Operation

#### 8.4.1.3 Abnormal Conditions

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# 9 Elements for NBAP communication

# 9.1 Message Functional Definition and Contents

# 9.1.1 General

Subclause 9.1 presents the contents of NBAP messages in tabular format. The corresponding ASN.1 definition is presented in subclause 9.3. In case there is contradiction between the tabular format in subclause 9.1 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional IEs, where the tabular format shall take precedence.

NOTE: The messages have been defined in accordance to the guidelines specified in ref. [26].

# 9.1.2 Message Contents

### 9.1.2.1 Presence

An information element can be of the following types:

M	IEs marked as Mandatory (M) shall always be included in the message.
0	IEs marked as Optional (O) may or may not be included in the message.
С	IEs marked as Conditional (C) shall be included in a message only if the condition is satisfied.  Otherwise the IE shall not be included.

In case of an Information Element group, the group is preceded by a name for the info group (in bold). It is also indicated how many times a group may be repeated in the message and whether the group is conditional. The presence

field of the Information Elements inside one group defines if the Information Element is mandatory, optional or conditional if the group is present.

# 9.1.2.2 Criticality

Each Information Element or Group of Information Elements may have a criticality information applied to it. Following cases are possible:

_	No criticality information is applied explicitly.
YES	Criticality information is applied. "YES" is usable only for non-repeatable information elements.
GLOBAL	The information element and all its repetitions together have one common criticality information.
	"GLOBAL" is usable only for repeatable information elements.
EACH	Each repetition of the information element has its own criticality information. It is not allowed to assign
	different criticality values to the repetitions. "EACH" is usable only for repeatable information elements.

# 9.1.2.3 Range

The Range column indicates the allowed number of copies of repetitive IEs.

# 9.1.2.4 Assigned Criticality

This column provides the actual criticality information as defined in subclause 10.3.2, if applicable.

# 9.1.3 COMMON TRANSPORT CHANNEL SETUP REQUEST

# 9.1.3.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
CHOICE Common Physical Channel To Be Configured	М				YES	ignore
>Secondary CCPCH						
>>Secondary CCPCH		1			_	
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>FDD SCCPCH Offset	М		9.2.2.15	Corresponds to [7]: S-CCPCH,k	_	
>>>DL Scrambling Code	C-PCH		9.2.2.13		_	
>>>FDD DL Channelisation Code Number	М		9.2.2.14	In case of IMB using multiple channelization codes then this IE indicates the first one.	-	
>>>TFCS	М		9.2.1.58	For the DL.	_	
>>>Secondary CCPCH Slot Format	M		9.2.2.43	If Extended Secondary CCPCH Slot Format IE is present, this IE shall be ignored	_	
>>>TFCI Presence	C- SlotFormat or 3.84Mcps TDD IMB		9.2.1.57	Refer to TS [7]	_	
>>>Multiplexing Position	М		9.2.2.23		_	
>>>Power Offset Information		1			_	
>>>P01	М		Power Offset 9.2.2.29	Power offset for the TFCI bits	-	
>>>P03	М		Power Offset 9.2.2.29	Power offset for the pilot bits	_	
>>>STTD Indicator	М		9.2.2.48		_	
>>>FACH Parameters		0 <maxno ofFACHs&gt;</maxno 			GLOBAL	reject
>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>>Transport Format Set	М		9.2.1.59	For the DL.	_	
>>>ToAWS	М		9.2.1.61		_	
>>>ToAWE	М		9.2.1.60		_	

			1		I	T
>>>Max FACH	M		DL Power	Maximum	_	
Power			9.2.1.21	allowed power		
				on the FACH.		
>>>Binding ID	0		9.2.1.4	Shall be	YES	ignore
				ignored if		9
				bearer		
				establishment		
				with ALCAP.	\( \( - \)	
>>>>Transport Layer	0		9.2.1.63	Shall be	YES	ignore
Address				ignored if		
				bearer		
				establishment		
				with ALCAP.		
>>>>TNL QoS	0		9.2.1.58A	Shall be	YES	ignore
				ignored if		9
				bearer		
				establishment		
				with ALCAP.		
Dunalanat	_		0.04.50	WILLI ALCAP.	VEO	
>>>Broadcast	0		9.2.1.5C		YES	ignore
Reference						<u> </u>
>>>IP Multicast	0		9.2.1.108		YES	ignore
Indication						
>>>PCH Parameters		01			YES	reject
>>>Common	M		9.2.1.14		_	
Transport Channel ID						
>>>Transport Format	М		9.2.1.59	For the DL.	_	
Set						
>>>ToAWS	М		9.2.1.61		_	
>>>ToAWE	M		9.2.1.60			
	1				_	
>>>PCH Power	M		DL Power		_	
			9.2.1.21			
>>>PICH		1			_	
Parameters						
>>>>Common	M		9.2.1.13		_	
Physical Channel ID						
>>>>FDD DL	M		9.2.2.14		_	
Channelisation Code						
Number						
>>>>PICH Power	М		9.2.1.49A		_	
>>>>PICH Mode	M		9.2.2.26	Number of PI	_	
///>FIGITIVIOUE	IVI		3.2.2.20		_	
, OTTD	N 4		0.0.0.40	per frame		
>>>>STTD	M		9.2.2.48		_	
Indicator						
>>>Binding ID	0		9.2.1.4	Shall be	YES	ignore
				ignored if		
				bearer		
				establishment		
				with ALCAP.		
>>>>Transport Layer	0		9.2.1.63	Shall be	YES	ignore
Address	_			ignored if		3
, (331000				bearer		
				establishment		
			0.5.1.5.	with ALCAP.		<del> </del>
>>>>TNL QoS	0		9.2.1.58A	Shall be	YES	ignore
				ignored if		
				bearer		
				establishment		
				with ALCAP.		

>>>MICH Parameters		01			YES	reject
>>>Common	M		9.2.1.13		_	
Physical Channel ID						
>>>FDD DL	M		9.2.2.14		_	
Channelisation Code						
Number						
>>>MICH Power	M		PICH		_	
			Power			
			9.2.1.49A			
>>>MICH Mode	М		9.2.2.21D	Number of NI per frame	_	
>>>STTD Indicator	M		9.2.2.48			
>>>FDD S-CCPCH	0		9.2.2.14B		YES	reject
Frame Offset						
>>>Modulation Power	0		9.2.2.91	Used for	YES	reject
Offset				MBSFN		
				operation and		
				3.84Mcps TDD		
				MBSFN IMB		
				operation only		
>>>Extended Secondary	0		9.2.2.92	Used for	YES	reject
CCPCH Slot Format				MBSFN		
				operation only		
>>>IMB Parameters	0		9.2.2.115	Used for	YES	reject
				3.84Mcps TDD		
				MBSFN IMB		
				operation only		
>PRACH						
>>PRACH		1			_	
>>>Common Physical	М		9.2.1.13		_	
Channel ID						
>>>Scrambling Code	М		9.2.2.42		_	
Number						
>>>TFCS	М		9.2.1.58	For the UL.	_	
>>>Preamble	М		9.2.2.31		_	
Signatures						
>>>Allowed Slot		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Format Information		ofSlotForm				
		atsPRACH				
		>				
>>>RACH Slot Format	М		9.2.2.37		_	
>>>RACH Sub Channel	М		9.2.2.38		_	
Numbers						
>>>Puncture Limit	М		9.2.1.50	For the UL	_	
>>>Preamble Threshold	M		9.2.2.32	. 5. 3.10 52	_	
>>>RACH Parameters	141	1	5.2.2.02		YES	reject
>>>Common	M	<u>'</u>	9.2.1.14			TOJECT
Transport Channel ID	IVI		3.2.1.14		_	
>>>>Transport Charmer ID	M		9.2.1.59	For the UL.	_	
Set						
>>>Binding ID	0		9.2.1.4	Shall be	YES	ignore
				ignored if		
				bearer		
				establishment		
				with ALCAP.		

>>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>AICH Parameters		1			_	
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>AICH Transmission Timing	М		9.2.2.1		_	
>>>FDD DL Channelisation Code Number	М		9.2.2.14		_	
>>>AICH Power	М		9.2.2.D		_	
>>>STTD Indicator	М		9.2.2.48		_	
>Not Used			NULL	This choice shall not be used. Reject procedure if received.		

Condition	Explanation
SlotFormat or 3.84Mcps TDD IMB	The IE shall be present if the Secondary CCPCH Slot Format IE is set to
	any of the values from 8 to 17 or if the IMB Parameters IE is included.
PCH	The IE shall be present if the PCH Parameters IE is not present.

Range Bound	Explanation
maxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary
	CCPCH
maxnoofSlotFormatsPRACH	Maximum number of SF for a PRACH

# 9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
CHOICE Common Physical	М				YES	ignore
Channel To Be Configured						
>Secondary CCPCHs						
>>SCCPCH CCTrCH ID	М		CCTrCH ID 9.2.3.3	For DL CCTrCH supporting one or several Secondary CCPCHs	-	
>>TFCS	М		9.2.1.58	For DL CCTrCH supporting one or several Secondary CCPCHs	-	
>>TFCI Coding	М		9.2.3.22		_	
>>Puncture Limit	М		9.2.1.50		_	
>>CHOICE HCR or LCR or 7.68 Mcps	М			See note 1 below	_	
>>>3.84Mcps TDD					_	
>>>Secondary CCPCH		1 <maxno ofSCCPC Hs&gt;</maxno 		See note 2 below	GLOBAL	reject
>>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>>TDD Channelisation Code	М		9.2.3.19		_	
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble Shift And Burst Type	M		9.2.3.7		_	
>>>>TDD Physical Channel Offset	М		9.2.3.20		_	
>>>>Repetition Period	М		9.2.3.16		_	
>>>>Repetition Length	М		9.2.3.15		_	
>>>>SCCPCH Power	М		DL Power 9.2.1.21		_	
>>>>TFCI Presence	0		9.2.1.57		YES	notify
>>>1.28Mcps TDD					_	
>>>Secondary CCPCH LCR		1 <maxno ofSCCPC</maxno 		See note 2 below	GLOBAL	reject
00. 0 20		HsLCR>				
>>>>Common Physical Channel ID	М	1 - 2 - 0	9.2.1.13		-	

	T	T	1	1		
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>>>Time Slot LCR	М		9.2.3.24A		_	
>>>>Midamble Shift LCR	М		9.2.3.7A	For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, the NodeB shall ignore the contents of this IE.	-	
>>>>TDD Physical Channel Offset	М		9.2.3.20		_	
>>>>Repetition Period	М		9.2.3.16		ı	
>>>>Repetition Length	M		9.2.3.15		ı	
>>>>SCCPCH Power	М		DL Power 9.2.1.21		ı	
>>>>SCCPCH Time Slot Format LCR	М		TDD DL DPCH Time Slot Format LCR 9.2.3.19D		-	
>>>>MBSFN Special Time Slot LCR	0		Time Slot LCR Extension 9.2.3.24B	Only for 1.28 Mcps TDD MBSFN only mode, this IE indicates the MBSFN Special Time Slot [19]. The Time Slot LCR IE for the Secondary CCPCH LCR shall be ignored if this IE appears.	YES	ignore
>>>7.68 Mcps TDD					_	
>>>Secondary CCPCH 7.68 Mcps		1 <maxno ofSCCPC Hs768&gt;</maxno 			GLOBAL	reject
>>>>Common Physical Channel ID 768Mcps	M		9.2.3.33		-	
>>>>TDD Channelisation Code 7.68Mcps	М		9.2.3.34		-	
>>>>Time Slot	M		9.2.3.23		-	
>>>>TFCI Presence	0		9.2.1.57		_	
>>>>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.35		-	

	1	1			1	
>>>>TDD Physical Channel Offset	М		9.2.3.20		_	
>>>>Repetition Period	М		9.2.3.16		_	
>>>>Repetition Length	М		9.2.3.15		_	
>>>>SCCPCH Power	М		DL Power 9.2.1.21		-	
>>FACH Parameters		0 <maxno ofFACHs&gt;</maxno 	9.2.1.21		GLOBAL	reject
>>>Common Transport Channel ID	М	0.77.07.707	9.2.1.14		-	
>>>FACH CCTrCH ID	М		CCTrCH ID 9.2.3.3		-	
>>>Transport Format Set	М		9.2.1.59	For the DL.	-	
>>>ToAWS	М		9.2.1.61			
	M		9.2.1.60		_	
>>>ToAWE	О		9.2.1.60 DL Power	Applical-1- t-		u=!+
>>>Max FACH Power	0		9.2.1.21	Applicable to 1.28Mcps TDD only	YES	reject
>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Broadcast Reference	0		9.2.1.5C		YES	ignore
>>>IP Multicast Indication	0		9.2.1.108		YES	ignore
>>PCH Parameters		01			YES	reject
>>>Common Transport Channel ID	М		9.2.1.14		-	- <b>1</b>
>>>PCH CCTrCH ID	М		CCTrCH ID 9.2.3.3		-	
>>>Transport Format Set	М		9.2.1.59	For the DL.	-	
>>>ToAWS	М		9.2.1.61		_	
>>>ToAWE	М		9.2.1.60		_	
>>>CHOICE HCR or LCR or 7.68Mcps	M			See note 1 below	_	
>>>3.84Mcps TDD					_	
>>>>PICH Parameters		01			YES	reject
>>>>Common Physical Channel ID	М		9.2.1.13		-	

Seminormolisation   Semi		•		1	1		1
Code	>>>>TDD	M		9.2.3.19		_	
New Parameters   New	Channelisation						
New Parameters   New	Code						
Section		М		9 2 3 23		-	
Shift And Burst   Type						_	
Type		101		0.2.0.7			
No.   No.							
Physical Channel Offset		<b>.</b>		0.000			
Offset		M		9.2.3.20		_	
Sysys   Repetition   M	-						
Period	Offset						
No.   No.	>>>>Repetition	М		9.2.3.16		_	
Length	Period						
Length	>>>> Repetition	М		9.2.3.15		_	
No.   No.	•						
Indicator Length		N/I		0228			
Nower		IVI		9.2.3.0		_	
Power				0.0.4.404			
S>>>>1.28Mcps TDD		M		9.2.1.49A		_	
New Yes   New Yes   New Yes   New Yes   New Yes			1				
Parameters LCR						_	
S>>>>Common	>>>>PICH		01			YES	reject
Physical Channel   ID	Parameters LCR		1				<u></u>
Physical Channel   ID		М		9.2.1.13		_	
ID							
No.							
Channelisation Code LCR         >>>>>Time Slot LCR         9.2.3.24A         -           >>>>>>Midamble Shift LCR         M         9.2.3.7A         -           >>>>>TDD         M         9.2.3.20         -           Physical Channel Offset         M         9.2.3.16         -           >>>>>Repetition Period         M         9.2.3.15         -           >>>>>Paging Indicator Length         M         9.2.3.8         -           >>>>>PICH Power         M         9.2.1.49A         -           >>>>>Power         Power         -         -           >>>>>>Second TDD Channelisation Code LCR         TDD Channelisation Code LCR         -           >>>>>TSTD O 9.2.1.64         YES reject reject Parameters           >>>>>PICH Parameters         -         -           >>>>>Common Physical Channel ID 768Mcps         M         9.2.3.34         -           Channelisation Code 7.68Mcps         -         -         -		N/	+	0.2.2.100			
Code LCR		IVI		9.2.3.198		_	
Second   S							
LCR							
No.	>>>>Time Slot	M		9.2.3.24A		_	
Shift LCR	LCR						
No.	>>>> Midamble	M		9.2.3.7A		_	
Physical Channel Offset	Shift LCR						
Physical Channel Offset	>>>>TDD	М		9.2.3.20		_	
Offset         >>>>>Repetition Period         M         9.2.3.16         —           >>>>>>Repetition Length         M         9.2.3.15         —           Length         —         —         —           >>>>>Paging Indicator Length         M         9.2.3.8         —           >>>>>PICH MPower         M         9.2.1.49A         —           >>>>>>Second TDD Channelisation Channelisation Code LCR         —         —           >>>>>TSTD Indicator         O         9.2.3.19a         YES reject           >>>>7.68Mcps TDD         —         —           >>>>>PICH Parameters         O1         YES reject           >>>>>Common Physical Channel ID 768Mcps         —         —           >>>>>TDD Channelisation Code 7.68Mcps         —         —							
No.							
Period		N4		0.0.0.40			
No.	- I	IVI		9.2.3.16		_	
Length		+	+	100515			
Note		M	1	9.2.3.15		_	
Indicator Length			1				
Note	>>>>Paging	M		9.2.3.8		_	
Note	Indicator Length		<u> </u>				
Power		M		9.2.1.49A		_	
>>>>>Second TDD Channelisation Code LCR         M         TDD Channelisat ion Code LCR 9.2.3.19a         –           >>>>TSTD Indicator         O         9.2.1.64         YES         reject           >>>>7.68Mcps TDD         –         YES         reject           Parameters         O1         YES         reject           >>>>Common Physical Channel ID 768Mcps         M         9.2.3.33         –           >>>>>TDD Channelisation Code 7.68Mcps         M         9.2.3.34         –							
TDD Channelisation Code LCR         Channelisat ion Code LCR 9.2.3.19a           >>>>>TSTD Indicator         O         9.2.1.64         YES         reject           >>>>7.68Mcps TDD         -         -         YES         reject           Parameters         O1         YES         reject           >>>>>Common Physical Channel ID 768Mcps         M         9.2.3.33         -         -           >>>>>TDD Channelisation Code 7.68Mcps         M         9.2.3.34         -         -		М	1	TDD		_	
Channelisation Code LCR         ion Code LCR           >>>>>TSTD         O           Indicator         9.2.1.64           >>>7.68Mcps TDD         -           >>>>PICH Parameters         01           >>>>Common Physical Channel ID 768Mcps         9.2.3.33           >>>>>TDD Channelisation Code 7.68Mcps         9.2.3.34							
Code LCR			1				
>>>>>TSTD Indicator         O         9.2.1.64         YES         reject           >>>>7.68Mcps TDD         —         —           >>>>PICH Parameters         O1         YES         reject           >>>>>Common Physical Channel ID 768Mcps         M         9.2.3.33         —           >>>>>TDD Channelisation Code 7.68Mcps         M         9.2.3.34         —			1	LCR			
>>>>>TSTD Indicator         O         9.2.1.64         YES         reject           >>>>7.68Mcps TDD         —         —           >>>>PICH Parameters         O1         YES         reject           >>>>>Common Physical Channel ID 768Mcps         M         9.2.3.33         —           >>>>>TDD Channelisation Code 7.68Mcps         M         9.2.3.34         —							
>>>>7.68Mcps TDD         —           >>>>PICH Parameters         01         YES reject           >>>>Common Physical Channel ID 768Mcps         —         —           >>>>>TDD Channelisation Code 7.68Mcps         M         9.2.3.34         —		0				YES	reject
>>>>PICH Parameters         01         YES reject           >>>>Common Physical Channel ID 768Mcps         M         9.2.3.33         -           >>>>>TDD Channelisation Code 7.68Mcps         M         9.2.3.34         -							
>>>>PICH Parameters         01         YES reject           >>>>Common Physical Channel ID 768Mcps         M         9.2.3.33         -           >>>>>TDD Channelisation Code 7.68Mcps         M         9.2.3.34         -	>>>>7.68Mcps TDD						
Parameters         9.2.3.33         -           >>>>>Common Physical Channel ID 768Mcps         9.2.3.34         -           >>>>>TDD Channelisation Code 7.68Mcps         M         9.2.3.34         -			01			YES	reject
>>>>Common         M         9.2.3.33         -           Physical Channel         ID 768Mcps         -         -           >>>>>TDD         M         9.2.3.34         -           Channelisation         Code 7.68Mcps         -         -							•
Physical Channel		М		9 2 3 33		_	
ID 768Mcps		'*'		0.2.0.00			
>>>>TDD M 9.2.3.34 — Channelisation Code 7.68Mcps			1				
Channelisation Code 7.68Mcps		+	+	00001			
Code 7.68Mcps		M		9.2.3.34		_	
			1				
>>>>Time Slot   M   9.2.3.23   -			1				
	>>>>Time Slot	M	<u></u>	9.2.3.23			

Shift And Burst   Type 7 r 8 Mkgs							
Sysystration	Shift And Burst	M		9.2.3.35		_	
Period	>>>>TDD Physical Channel	М		9.2.3.20		_	
Name		М		9.2.3.16		_	
Name	>>>>Repetition	М		9.2.3.15		_	
Name	>>>>Paging	М		9.2.3.8		_	
S>>PCH Power   O	>>>> PICH	М		9.2.1.49A		_	
Shall be ignored if bearer establishment with ALCAP.		0			1.28Mcps TDD	YES	reject
Section   Sect	>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment	YES	ignore
Solution   Solution		0		9.2.1.63	ignored if bearer establishment	YES	ignore
>>MICH Parameters         01         YES         reject           >>>Common Physical Channel ID         M         9.2.1.13         -           >>>TDD Physical Channel Offset         M         9.2.3.20         -           >>>Repetition Period         M         9.2.3.16         -           >>>Repetition Length         M         9.2.3.15         -           >>>Notification Indicator Length         M         9.2.3.74a         -           >>>MICH Power         M         PICH Power 9.2.1.49A         -           >>>>AMMCH Power         M         -         -           >>>>>MICH Parameters HCR         1         -         -           >>>>>>TIDD Channelisation Code         M         9.2.3.23         -           >>>>>>Time Slot Shift And Burst Type         M         9.2.3.7         -	>>>TNL QoS				ignored if bearer establishment		ignore
>>>Common Physical Channel ID         M         9.2.1.13         –           >>>TDD Physical Channel Offset         M         9.2.3.20         –           >>>Repetition Period >>>Repetition Length         M         9.2.3.15         –           >>>Notification Indicator Length         M         9.2.3.7Aa         –           >>>MICH Power         M         PICH Power 9.2.1.49A         –           >>>CHOICE HCR or LCR or 7.68 Mcps         M         –           >>>>SABAMcps TDD         –         –           >>>>>MICH Parameters HCR         1         –           >>>>>TDD Channelisation Code         9.2.3.19         –           >>>>>>Time Slot Shift And Burst Type         M         9.2.3.7         –	>>TSTD Indicator	0		9.2.1.64		YES	reject
>>>Common Physical Channel ID         M         9.2.1.13         –           >>>TDD Physical Channel Offset         M         9.2.3.20         –           >>>Repetition Period >>>Repetition Length         M         9.2.3.15         –           >>>Notification Indicator Length         M         9.2.3.7Aa         –           >>>MICH Power         M         PICH Power 9.2.1.49A         –           >>>CHOICE HCR or LCR or 7.68 Mcps         M         –           >>>>SABAMcps TDD         –         –           >>>>>MICH Parameters HCR         1         –           >>>>>TDD Channelisation Code         9.2.3.19         –           >>>>>>Time Slot Shift And Burst Type         M         9.2.3.7         –			01			YES	reject
>>>TDD Physical Channel Offset         M         9.2.3.20         -           >>>Repetition Period         M         9.2.3.16         -           >>>Repetition Length         M         9.2.3.15         -           >>>Notification Indicator Length         M         9.2.3.7Aa         -           >>>MICH Power         M         PICH Power 9.2.1.49A         -           >>>CHOICE HCR or LCR or 7.68 Mcps         M         -           >>>>>MICH Parameters HCR         1         -           >>>>>>TDD Channelisation Code         9.2.3.19         -           >>>>>>Time Slot Shift And Burst Type         M         9.2.3.23         -	>>>Common Physical	М		9.2.1.13		-	
>>>Repetition Period         M         9.2.3.16         -           >>>Repetition Length         M         9.2.3.15         -           >>>Notification Indicator Length         M         9.2.3.7Aa         -           Length         -         -         -           >>>MICH Power         M         PICH Power         -           9.2.1.49A         -         -           >>>CHOICE HCR or LCR or LCR or 7.68 Mcps         -         -           >>>>3.84Mcps TDD         -         -           >>>>>MICH Parameters HCR         1         -           >>>>>TDD Channelisation Code         9.2.3.19         -           >>>>>Time Slot M         9.2.3.23         -           >>>>>Midamble Shift And Burst Type         M         9.2.3.7         -	>>>TDD Physical	М		9.2.3.20		_	
>>>Repetition Length         M         9.2.3.15         -           >>>Notification Indicator Length         M         9.2.3.7Aa         -           >>>MICH Power         M         PICH Power 9.2.1.49A         -           >>>CHOICE HCR or LCR or 7.68 Mcps         M         -         -           >>>>3.84Mcps TDD         -         -         -           >>>>>MICH Parameters HCR         1         -         -           >>>>>TDD Channelisation Code         M         9.2.3.19         -           >>>>>Time Slot M         9.2.3.23         -           >>>>>Midamble Shift And Burst Type         M         9.2.3.7         -		М		9.2.3.16		_	
>>>Notification Indicator Length         M         9.2.3.7Aa         -           >>>MICH Power         M         PICH Power 9.2.1.49A         -           >>>CHOICE HCR or LCR or 7.68 Mcps         M         -         -           >>>>MICH Parameters HCR         1         -         -           >>>>>TDD Channelisation Code         M         9.2.3.19         -         -           >>>>>Time Slot M         9.2.3.23         -         -           >>>>>Midamble Shift And Burst Type         M         9.2.3.7         -         -	•	М		9.2.3.15		_	
>>>MICH Power         M         PICH Power 9.2.1.49A         —           >>>CHOICE HCR or LCR or 7.68 Mcps         M         —         —           >>>>3.84Mcps TDD         —         —         —           >>>>>MICH Parameters HCR         1         —         —           >>>>>TDD Channelisation Code         M         9.2.3.19         —           >>>>>Time Slot M         9.2.3.23         —           >>>>>Midamble Shift And Burst Type         M         9.2.3.7         —	>>>Notification Indicator					_	
LCR or 7.68 Mcps       -         >>>>MICH       1         Parameters HCR       -         >>>>>TDD       M         Channelisation       -         Code       -         >>>>>Time Slot       M         9.2.3.23       -         >>>>>Midamble       M         Shift And Burst       9.2.3.7         Type       -		М		Power		_	
>>>>MICH         1         —           Parameters HCR         9.2.3.19         —           >>>>>TDD         M         9.2.3.19         —           Channelisation         Code         —           >>>>>Time Slot         M         9.2.3.23         —           >>>>>Midamble         M         9.2.3.7         —           Shift And Burst         Type         —		М				_	
>>>>MICH         1         —           Parameters HCR         9.2.3.19         —           >>>>>TDD         M         9.2.3.19         —           Channelisation         Code         —           >>>>>Time Slot         M         9.2.3.23         —           >>>>>Midamble         M         9.2.3.7         —           Shift And Burst         Type         —	•						
>>>>>TDD         M         9.2.3.19         -           Channelisation         Code         -         -           >>>>>Time Slot         M         9.2.3.23         -           >>>>>Midamble         M         9.2.3.7         -           Shift And Burst         Type         -         -			1			_	
>>>>>TDD         M         9.2.3.19         -           Channelisation         Code         -         -           >>>>>Time Slot         M         9.2.3.23         -           >>>>>Midamble         M         9.2.3.7         -           Shift And Burst         Type         -         -							
>>>>>Midamble M 9.2.3.7 – Shift And Burst Type	>>>>TDD Channelisation	М		9.2.3.19		-	
>>>>>Midamble M 9.2.3.7 – Shift And Burst Type		М		9.2.3.23		_	
	>>>>Midamble Shift And Burst					_	
	>>>>1.28Mcps TDD						

	1			_	
М		9.2.3.19a		-	
М		9.2.3.24A		_	
M		9.2.3.7A	For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, the NodeB shall ignore the contents of this IE.	_	
M		Channelisat ion Code LCR		_	
М		9.2.1.64		_	
0		Time Slot LCR Extension 9.2.3.24B	Only for 1.28 Mcps TDD MBSFN only mode, this IE indicates the MBSFN Special Time Slot [19]. The Time Slot LCR IE for the MICH parameters LCR shall be ignored if this IE appears.	YES	ignore
	1			_	
M		9.2.3.34		-	
M		9.2.3.23		_	
M		9.2.3.35		_	
0		9.2.1.87	Applicable to 3.84Mcps TDD and 7.68Mcps TDD in MBSFN operation only	YES	reject
M	07	9.2.3.24A	Applicable to 1.28Mcps TDD for MBSFN. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
	M M M M O  M O	M M M O O O O O O O O O O O O O O O O O	M 9.2.3.19a  M 9.2.3.24A  M 9.2.3.7A  M 9.2.3.7A  M 9.2.3.19a  M 9.2.3.19a  9.2.1.64  O Time Slot LCR Extension 9.2.3.24B  M 9.2.3.24B  O 9.2.3.34  M 9.2.3.35  O 9.2.1.87	M         9.2.3.19a           M         9.2.3.24A           M         9.2.3.7A         For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, the NodeB shall ignore the contents of this IE.           M         TDD Channelisat ion Code LCR 9.2.3.19a         M         9.2.1.64           O         Time Slot LCR Extension 9.2.3.24B         MBSFN only mode, this IE indicates the MBSFN Special Time Slot [19]. The Time Slot LCR IE for the MICH parameters LCR shall be ignored if this IE appears.           I         M         9.2.3.34           M         9.2.3.35         Applicable to 3.84Mcps TDD and 7.68Mcps TDD in MBSFN Not Applicable to 1.28Mcps TDD for MBSFN. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD or 7.68Mcps TDD. or 7.68Mcps TDD.           O         9.7.68Mcps TDD. or 7.68Mcps TDD.	M         9.2.3.19a         -           M         9.2.3.24A         -           M         9.2.3.7A         For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, the NodeB shall ignore the contents of this IE.           M         TDD Channelisat ion Code LCR 9.2.3.19a         -           M         9.2.1.64         -           O         Time Slot LCR Extension 9.2.3.24B         MSFN only mode, this IE indicates the MBSFN Special Time Slot [19]. The Time Slot LCR IE for the MICH parameters LCR shall be ignored if this IE appears.         -           M         9.2.3.34         -           M         9.2.3.35         -           M         9.2.3.35         -           O         9.2.1.87         Applicable to 3.84Mcps TDD and 7.68Mcps TDD and 7.68Mcps TDD in MBSFN operation only operation only Applicable to 1.28Mcps TDD for MBSFN. Not Applicable to 1.28Mcps TDD for MBSFN. Not Applicable to 3.84Mcps TDD for MBSFN.

T: 01 / D /	1		0 "			
>>>Time Slot Parameter	M		Cell		_	
ID			Parameter			
			ID			
			9.2.3.4		YES	rainat
>>UARFCN	0		9.2.1.65	Corresponds to	YES	reject
				Nt [15]		
				This IE		
				indicates the		
				frequency of		
				the Secondary		
				Frequency on		
				which SCCPCH		
				is configured.		
				Applicable to		
				1.28Mcps TDD		
				MBSFN. Not		
				Applicable to		
				3.84Mcps TDD		
				or 7.68Mcps		
				TDD.		
>PRACH						
>>CHOICE HCR or LCR	М			See note 1	_	
or 7.68 Mcps				below		
>>>3.84Mcps TDD						
>>>PRACH		1			YES	reject
>>>>Common	M		9.2.1.13		_	
Physical Channel ID						
>>>>TFCS	M		9.2.1.58		_	
>>>>Time Slot	М		9.2.3.23		_	
>>>>TDD	M		9.2.3.19		_	
Channelisation Code						
>>>>Max PRACH	M		9.2.3.6		_	
Midamble Shifts						
>>>>PRACH	M		9.2.3.14		_	
Midamble						
>>>>RACH		1			YES	reject
>>>>Common	М		9.2.1.14		_	
Transport Channel						
ID						
>>>>Transport	М		9.2.1.59	For the UL	_	
Format Set						
>>>>Binding ID	0		9.2.1.4	Shall be	YES	ignore
				ignored if		
				bearer		
				establishment		
				with ALCAP.		
>>>>Transport	0		9.2.1.63	Shall be	YES	ignore
Layer Address				ignored if		
_				bearer		
				establishment		
				with ALCAP.		
>>>>TNL QoS	0		9.2.1.58A	Shall be	YES	ignore
				ignored if		-
				bearer		
				establishment		
				with ALCAP.		
>>>1.28Mcps TDD					_	
	1		1			i

>>>PRACH LCR		1 <maxno ofPRACHL CRs&gt;</maxno 			GLOBAL	reject
>>>>Common Physical Channel ID	М	01107	9.2.1.13		-	
>>>>TFCS	М		9.2.1.58		_	
>>>>Time Slot LCR	М		9.2.3.24A		_	
>>>>TDD Channelisation Code LCR	М		9.2.3.19a		-	
>>>>Midamble Shift LCR	М		9.2.3.7A		_	
>>>>RACH		1			YES	reject
>>>>>Common Transport Channel ID	M		9.2.1.14		_	
>>>>Transport Format Set	М		9.2.1.59	For the UL	_	
>>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>UARFCN	0		9.2.1.65	Corresponds to Nt [15]. This IE indicates the frequency of the secondary frequency on which PRACH to be set up. See note 3 below.	YES	reject
>>>7.68 Mcps TDD					_	
>>>PRACH		1			YES	reject
>>>>Common Physical Channel ID 768Mcps	M		9.2.3.33		_	
>>>>TFCS	M		9.2.1.58		_	
>>>>Time Slot	M		9.2.3.23		_	
>>>>TDD Channelisation Code 7.68Mcps	M		9.2.3.34		-	
>>>>Max PRACH Midamble Shifts	M		9.2.3.6		_	

DDACH	М	1	0.0.0.4.4			
>>>>PRACH Midamble	IVI		9.2.3.14		_	
>>>>RACH		1			YES	reject
>>>>Common Transport Channel ID	М		9.2.1.14		-	, , , ,
>>>>Transport Format Set	М		9.2.1.59	For the UL	-	
>>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>FPACH		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		-	
>>>TDD Channelisation Code LCR	М		9.2.3.19a		-	
>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble Shift LCR	М		9.2.3.7A		-	
>>>Max FPACH Power	М		9.2.3.5E			
>>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] This IE indicates the frequency of Secondary Frequency on which FPACH to be set up.	YES	reject
>PLCCH				1.28 Mcps TDD only	YES	ignore
>>Max PLCCH Power	М		DL Power 9.2.1.21		_	
>>Common Physical Channel ID	М		9.2.1.13		-	
>>TDD Channelisation Code	М		9.2.3.19		-	
>>Time Slot LCR	M		9.2.3.24A		_	
>>Midamble Shift LCR >E-RUCCH	M		9.2.3.7A	3.84Mcps TDD only	YES	ignore
>>Common Physical Channel ID	M		9.2.1.13		-	
>>Time Slot	M		9.2.3.23		_	

>>TDD Channelisation Code	М	9.2.3.19		_	
>>Max E-RUCCH Midamble Shifts	М	9.2.3.44		-	
>>E-RUCCH Midamble	M	9.2.3.14		_	
>E-RUCCH 7.68Mcps			7.68Mcps TDD only	YES	ignore
>>Common Physical Channel ID 7.68Mcps	М	9.2.3.33		-	
>>Time Slot	M	9.2.3.23		_	
>>TDD Channelisation Code 7.68Mcps	М	9.2.3.34		_	
>>Max E-RUCCH Midamble Shifts	М	9.2.3.44		_	
>>E-RUCCH Midamble	M	9.2.3.14		_	

NOTE 1: This information element is a simplified representation of the ASN.1. The choice is in reality performed through the use of a ProtocollE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

NOTE 2: This information element is a simplified representation of the ASN.1. Repetitions 1 to 8 and repetitions 9 to maxnoofSCCPCHs / maxnoofSCCPCHsLCR are represented by separate ASN.1 structures.

NOTE 3: The configured PRACH resources on secondary frequency shall only be used for E-DCH random access.

Range Bound	Explanation
maxnoofSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH for 3.84Mcps TDD
maxnoofSCCPCHsLCR	Maximum number of Secondary CCPCHs per CCTrCH for 1.28Mcps TDD
maxnoofSCCPCHs768	Maximum number of Secondary CCPCHs per CCTrCH for 7.68 Mcps TDD
maxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary CCPCH
maxnoofPRACHLCRs	Maximum number of PRACHs LCR that can be defined on a RACH for 1.28Mcps TDD

# 9.1.4 COMMON TRANSPORT CHANNEL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
FACH Parameters Info		0 <maxno ofFACHs&gt;</maxno 		The FACH Parameters may be combined with PCH Parameters	GLOBAL	ignore
>FACH Parameters	M		Common Transport Channel Information Response 9.2.1.14A		-	
PCH Parameters	0		Common Transport Channel Information Response 9.2.1.14A	The PCH Parameters may be combined with FACH Parameters	YES	ignore
RACH Parameters	0		Common Transport Channel Information Response 9.2.1.14A	The RACH Parameters shall not be combined with FACH Parameters or PCH Parameters	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation
maxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary
	CCPCH[FDD] / a group of Secondary CCPCHs [TDD]

## 9.1.5 COMMON TRANSPORT CHANNEL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	_
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	_
Cause	М		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.6 COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST

#### 9.1.6.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	,
C-ID	М		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
CHOICE Common Physical	М				YES	reject
Channel To Be Configured						
>Secondary CCPCH						
>>FACH Parameters		0 <maxfa CHCell&gt;</maxfa 			GLOBAL	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>Max FACH Power	0		DL Power 9.2.1.21	Maximum allowed power on the FACH.	_	
>>>ToAWS	0		9.2.1.61		_	
>>>ToAWE	0		9.2.1.60		_	
>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer reconfiguration with ALCAP.	YES	ignore
>>PCH Parameters		01			YES	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>PCH Power	0		DL Power 9.2.1.21	Power to be used on the PCH.	_	
>>>ToAWS	0		9.2.1.61		_	
>>>ToAWE	0		9.2.1.60		_	
>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer reconfiguration with ALCAP.	YES	ignore
>>PICH Parameters		01			YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>PICH Power	0		9.2.1.49A		-	
>>MICH Parameters		01			YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		-	
>>>MICH Power	0		PICH Power 9.2.1.49A		_	
>PRACH						
>>PRACH Parameters		0 <maxp RACHCell &gt;</maxp 			GLOBAL	reject

>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>Preamble Signatures	0		9.2.2.31		-	
>>>Allowed Slot Format Information		0 <maxno ofSlotForm atsPRACH &gt;</maxno 				
>>>RACH Slot Format	М		9.2.2.37		-	
>>>RACH Sub Channel Numbers	0		9.2.2.38		_	
>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer reconfiguration with ALCAP.	YES	ignore
>>AICH Parameters		0 <maxp RACHCell &gt;</maxp 			GLOBAL	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>AICH Power	0		9.2.2.D		_	
>Not Used			NULL	This choice shall not be used. Reject procedure if received.		

Range Bound	Explanation
maxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxPRACHCell	Maximum number of PRACHs and AICHs that can be defined in a Cell
maxnoofSlotFormatsPRACH	Maximum number of SF for a PRACH

# 9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigne d Criticalit y
Message Discriminator	М		9.2.1.45		_	_
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
Secondary CCPCH Parameters		01			YES	reject

					1	
>CCTrCH ID	M		9.2.3.3	For DL	_	
				CCTrCH		
				supporting one		
				or several		
				Secondary		
				CCPCHs		
>Secondary CCPCHs To		0 <maxno< td=""><td></td><td>See note 1</td><td>GLOBAL</td><td>reject</td></maxno<>		See note 1	GLOBAL	reject
Be Configured		ofSCCPC		below		•
		Hs>				
>>Common Physical	М	-	9.2.1.13		_	
Channel ID	1		0.2.1110			
>>SCCPCH Power	0		DL power		_	
			9.2.1.21			
PICH Parameters		01			YES	reject
>Common Physical	М		9.2.1.13		_	•
Channel ID						
>PICH Power	0		9.2.1.49A		_	
FACH Parameters		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
	<u> </u>	ofFACHs>	<u> </u>			<u> </u>
>Common Transport	М		9.2.1.14		_	
Channel ID		1				
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60			
>Max FACH Power	0		DL Power	Applicable to	YES	reject
			9.2.1.21	1.28Mcps TDD		,
			0.2	only		
>TNL QoS	0		9.2.1.58A	Shall be	YES	ignore
				ignored if		
				bearer reconfiguration		
				with ALCAP.		
PCH Parameters		01		Will 7 LEO7 II .	YES	reject
>Common Transport	М		9.2.1.14		_	.,
Channel ID	'''		0.2			
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>PCH Power	0		DL Power	Applicable to	YES	reject
			9.2.1.21	1.28Mcps TDD		. 0,001
			0.2.1.21	only		
>TNL QoS	0		9.2.1.58A	Shall be	YES	ignore
				ignored if		
				bearer		
				reconfiguration with ALCAP.		
FPACH Parameters		01		Mandatory for	YES	reject
Transition of the state of the		0 1		1.28Mcps TDD.	163	reject
				Not Applicable		
				to 3.84Mcps		
				TDD or		
				7.68Mcps		
Commence Discort	1	1	1	TDD		
>Common Physical Channel ID	M		9.2.1.13		_	
>Max FPACH Power	0		9.2.3.5E			
	1	0.1	9.2.3.3E		VEC	roinet
MICH Parameters	N4	01	0.0.4.40		YES	reject
>Common Physical	M		9.2.1.13		_	
Channel ID	1_	1				
>MICH Power	0		PICH		_	
			Power			
		1	9.2.1.49A			
PLCCH Parameters		01		Applicable to	YES	ignore
	1			1.28Mcps TDD		
				only		

>Max PLCCH Power	0		DL Power 9.2.1.21		_	
Secondary CCPCH Parameters 7.68Mcps		01		Applicable to 7.68 Mcps TDD only	YES	reject
>CCTrCH ID	M		9.2.3.3	For DL CCTrCH supporting one or several Secondary CCPCHs	-	
>Secondary CCPCHs To Be Configured		0 <maxno ofSCCPC Hs768&gt;</maxno 			-	
>>Common Physical Channel ID 7.68Mcps	М		9.2.3.33		_	
>>SCCPCH Power	0		DL power 9.2.1.21		_	
PICH Parameters 7.68Mcps		01		Applicable to 7.68 Mcps TDD only	YES	reject
>Common Physical Channel ID 7.68Mcps	М		9.2.3.33		_	
>PICH Power	0		9.2.1.49A		_	
MICH Parameters 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	reject
>Common Physical Channel ID 7.68Mcps	М		9.2.3.33		-	
>MICH Power	0		PICH Power 9.2.1.49A		-	
UpPCH Parameters		01		Applicable to 1.28Mcps TDD only	YES	reject
>UpPCH Position LCR	0		9.2.3.4Q	This position of UpPCH. For a multi-frequency cell, if this IE is not included in this message, UpP CH in secondary frequency indicated by "UARFCN" shall be deleted.	-	
>UARFCN	0		9.2.1.65	Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt [15].	-	

NOTE 1: This information element is a simplified representation of the ASN.1. Repetitions 1 to 8 and repetitions 9 to maxnoofSCCPCHs are represented by separate ASN.1 structures. Furthermore, maxnoofSCCPCHs has different values in the ASN.1 for each of the two TDD options.

Range Bound	Explanation
maxnoofSCCPCHs	Maximum number of SCCPCHs that can be repeated in a Cell
maxnoofFACHs	Maximum number of FACHs that can be repeated in a Cell
maxnoofSCCPCHs768	Maximum number of SCCPCHs that can be repeated in a Cell at
	7.68Mcps

# 9.1.7 COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.8 COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.9 COMMON TRANSPORT CHANNEL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Common Physical Channel ID	M		9.2.1.13	Indicates the Common Physical Channel for which the Common Transport Channels (together with the Common Physical Channel) shall be deleted.	YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Common Physical Channel ID 7.68Mcps	0		9.2.3.33	Included at 7.68 Mcps when the physical channel ID exceeds the range of " Common Physical Channel ID"	YES	reject

#### 9.1.10 COMMON TRANSPORT CHANNEL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.11 BLOCK RESOURCE REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Blocking Priority Indicator	M		9.2.1.5		YES	reject
Shutdown Timer	C- BlockNorm al		9.2.1.56		YES	reject

Condition	Explanation
BlockNormal	The IE shall be present if the Blocking Priority Indicator IE indicates
	"Normal Priority".

#### 9.1.12 BLOCK RESOURCE RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.13 BLOCK RESOURCE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Cause	М		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.14 UNBLOCK RESOURCE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	ignore

#### 9.1.15 AUDIT REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	

# 9.1.16 AUDIT REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Start Of Audit Sequence Indicator	М		9.2.1.56B		YES	reject

# 9.1.17 AUDIT RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
End Of Audit Sequence Indicator	М		9.2.1.29A		YES	ignore
Cell Information		0 <maxce IlinNode B&gt;</maxce 			EACH	ignore
>C-ID	М		9.2.1.9		_	
>Configuration Generation ID	М		9.2.1.16		_	
>Resource Operational State	М		9.2.1.52		_	
>Availability Status	М		9.2.1.2		_	
>Local Cell ID	M		9.2.1.38	The local cell that the cell is configured on	_	
>Primary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	Applicable to FDD only	YES	ignore
>Secondary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	Applicable to FDD only	YES	ignore
>Primary CPICH Information	0		Common Physical Channel Status Information 9.2.1.13A	Applicable to FDD only	YES	ignore
>Secondary CPICH Information		0 <maxs CPICHCell</maxs 		Applicable to FDD only	EACH	ignore
>>Secondary CPICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>Primary CCPCH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>BCH Information	0		Common Transport Channel Status Information 9.2.1.14B		YES	ignore

>Secondary CCPCH Information		0 <maxs CCPCHCe II&gt;</maxs 		See note 1 below	EACH	ignore
>>Secondary CCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>PCH Information	0		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>PICH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>FACH Information		0 <maxfa CHCell&gt;</maxfa 			EACH	ignore
>>FACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		=	
>PRACH Information		0 <maxp RACHCell &gt;</maxp 			EACH	ignore
>>PRACH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>RACH Information		0 <maxr ACHCell&gt;</maxr 			EACH	ignore
>>RACH Individual Information	М		Common Transport Channel Status Information 9.2.1.14B		-	
>AICH Information		0 <maxp RACHCell &gt;</maxp 		Applicable to FDD only	EACH	ignore
>>AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>Not Used 1	0		NULL	This item shall not be used. Ignore if received.	-	
>Not Used 2	0		NULL	This item shall	_	

		1	1			
				not be used.		
				Ignore if		
N (II IO				received.		
>Not Used 3	0		NULL	This item shall	_	
				not be used.		
				Ignore if		
N. d.D. L.d.				received.		
>Not Used 4	0		NULL	This item shall	_	
				not be used.		
				Ignore if		
001117				received.		
>SCH Information	0		Common	TDD Sync	YES	ignore
			Physical	Channel		
			Channel	Applicable to		
			Status	3.84Mcps		
			Information	TDD only		
			9.2.1.13A			
>FPACH Information		0 <maxfp< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxfp<>		Applicable to	EACH	ignore
		ACHCell>		1.28Mcps		
				TDD only		
>>FPACH Individual Information	M		Common		_	
information			Physical			
			Channel			
			Status			
			Information			
			9.2.1.13A			
>DwPCH Information	0		Common	Applicable to	YES	ignore
			Physical	1.28Mcps		
			Channel	TDD only		
			Status			
			Information			
			9.2.1.13A			
>HS-DSCH Resources Information		0 <maxfr< td=""><td></td><td>See note 2</td><td>EACH</td><td>ignore</td></maxfr<>		See note 2	EACH	ignore
information		equencyin		below		
		Cell>				
>>Resource Operational State	M		9.2.1.52		_	
>>Availability Status	М		9.2.1.2		_	
>>UARFCN	0		9.2.1.65	Corresponds	YES	ignore
				to Nt [15]		
				Applicable to		
				1.28Mcps TDD when		
				using multiple		
				frequencies.		
>MICH Information	0		Common	1	YES	ignore
			Physical		0	.g
			Channel			
			Status			
			Information 9.2.1.13A			
>E-DCH Resources		0 <maxfr< td=""><td>3.2.1.13A</td><td>See note 2</td><td>EACH</td><td>ignore</td></maxfr<>	3.2.1.13A	See note 2	EACH	ignore
Information		equencyin		below	_/,0//	.9.1010
		Cell>		DEIOM		
>>Resource Operational State	M	OGII/	9.2.1.52		_	
>>Availability Status	M		9.2.1.2		_	
>>UARFCN	0		9.2.1.65	Corresponds	YES	ignore
			3.2.1.00	to Nt [15]		
				Applicable to		
				1.28Mcps		
			1			1

				TDD when		
				using multiple		
				frequencies.		
>PLCCH Information		0 <maxpl< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxpl<>		Applicable to	EACH	ignore
		CCHCell>		1.28Mcps	_,	.g
				TDD only		
>>PLCCH Individual	М		Common	j	_	
Information			Physical			
			Channel			
			Status			
			Information			
			9.2.1.13A			
>Primary CCPCH	0		Common		YES	ignore
Information 7.68Mcps			Physical Channel			
			Status			
			Information			
			7.68 Mcps			
			9.2.3.36			
>Secondary CCPCH Information 7.68Mcps		0 <maxs< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxs<>			EACH	ignore
mormation 7.08Mcps		CCPCHCe				
0 1 0000:		<i>II768&gt;</i>				
>>Secondary CCPCH Individual Information	M		Common Physical		_	
7.68 Mcps			Channel			
7.00 Mopo			Status			
			Information			
			7.68 Mcps			
>PICH Information			9.2.3.36 Common		YES	ignoro
7.68Mcps	0		Physical		YES	ignore
7.001/1003			Channel			
			Status			
			Information			
			7.68 Mcps			
>PRACH Information		0 <maxp< td=""><td>9.2.3.36</td><td></td><td>EACH</td><td>ignore</td></maxp<>	9.2.3.36		EACH	ignore
7.68Mcps		RACHCell			_,	.g
		>				
>>PRACH Individual	М		Common		_	
Information 7.68Mcps			Physical			
			Channel			
			Status Information			
			7.68 Mcps			
			9.2.3.36			
>SCH Information	0		Common	TDD Sync	YES	ignore
7.68Mcps			Physical	Channel		
			Channel	Applicable to		
			Status Information	7.68Mcps TDD only		
			7.68 Mcps	155 Only		
			9.2.3.36			
>MICH Information	0		Common		YES	ignore
7.68Mcps			Physical			
			Channel Status			
			Information			
			7.68 Mcps			
			9.2.3.36			
>E-RUCCH Information		0 <maxe-< td=""><td></td><td>3.84Mcps</td><td>EACH</td><td>ignore</td></maxe-<>		3.84Mcps	EACH	ignore
		RUCCHCe		TDD only		
		<i>II&gt;</i>				
>>E-RUCCH Individual	M		Common		_	
Information		1				

	1					
			Physical			
			Channel			
			Status			
			Information 9.2.1.13A			
>E-RUCCH Information		0 <maxe-< td=""><td></td><td>7.68Mcps</td><td>EACH</td><td>ignore</td></maxe-<>		7.68Mcps	EACH	ignore
7.68Mcps		RUCCHCe II>		TDD only		
>>E-RUCCH Individual	М		Common		-	
Information 7.68Mcps			Physical			
			Channel			
			Status			
			Information			
			7.68 Mcps 9.2.3.36			
>UARFCN Information		0 <maxfr< td=""><td>0.2.0.0</td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxfr<>	0.2.0.0	Applicable to	EACH	ignore
LCR		equencyin		1.28Mcps		
		Cell>		TDD when		
				using multiple frequencies.		
>>UARFCN	М		9.2.1.65	Corresponds	_	
>>Resource Operational	M		0.04.50	to Nt [15]	_	
State	IVI		9.2.1.52			
>>Availability Status	М		9.2.1.2		_	
>UpPCH Information LCR		0 <maxfr< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxfr<>		Applicable to	EACH	ignore
		equencyin		1.28Mcps		
		Cell>		TDD only.		
>>UARFCN	0		9.2.1.65	Mandatory for	_	
				1.28Mcps		
				TDD when		
				using multiple		
				frequencies. Corresponds		
				to Nt [15]		
>>UpPCH Position LCR	М		9.2.3.4Q		_	
>>Resource Operational State	М		9.2.1.52		_	
>>Availability Status	М		9.2.1.2		_	
Communication Control		0 <maxc< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxc<>			EACH	ignore
Port Information		CPinNode				
		B>				
>Communication Control Port ID	М		9.2.1.15		_	
>Resource Operational State	М		9.2.1.52		-	
>Availability Status	М		9.2.1.2		_	
Local Cell Information		0 <maxlo< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxlo<>			EACH	ignore
		calCellinN ode B>				
>Local Cell ID	М	OUE D>	9.2.1.38		_	
>DL Or Global Capacity	M		9.2.1.20B		_	
Credit >UL Capacity Credit	0		9.2.1.65A		_	
>Common Channels	M		9.2.1.9A		_	
Capacity Consumption Law	N4		0.04.004			
>Dedicated Channels Capacity Consumption Law	М		9.2.1.20A		_	

>Maximum DL Power Capability  >Minimum Spreading Factor  >Minimum DL Power Capability  >Local Cell Group ID  >Reference Clock Availability  >Power Local Cell Group ID  >HSDPA Capability  >E-DCH Capability  O	)	9.2.1.39		-	
Factor  >Minimum DL Power Capability  >Local Cell Group ID  >Reference Clock Availability  >Power Local Cell Group ID  >HSDPA Capability  O	)	_		_	
Capability  >Local Cell Group ID  >Reference Clock Availability  >Power Local Cell Group ID  >HSDPA Capability  O		0.0.4.404			
>Local Cell Group ID O >Reference Clock O Availability >Power Local Cell Group ID O >HSDPA Capability O		9.2.1.46A		-	
>Reference Clock O Availability >Power Local Cell Group ID O >HSDPA Capability O	)	9.2.1.37A		_	
>Power Local Cell Group ID O >HSDPA Capability O		9.2.3.14A	TDD only	YES	ignore
>HSDPA Capability O	)	9.2.1.49B		YES	ignore
		9.2.1.31Ga		YES	ignore
. /L-1//// // // I // // I //		9.2.1.70		YES	ignore
>E-DCH TTI2ms Capability C El at	DCHCap bility	9.2.2.13V	FDD only	YES	ignore
at	:- DCHCap bility	9.2.2.13W	FDD only	YES	ignore
	:- DCHCap bility	9.2.2.13X	FDD only	YES	ignore
>E-DCH Capacity O Consumption Law		9.2.2.13Ja	FDD only	YES	ignore
>F-DPCH Capability O		9.2.2.16a	FDD only	YES	ignore
>E-DCH TDD Capacity O Consumption Law	)	9.2.3.60	TDD only	YES	ignore
>Continuous Packet O Connectivity DTX-DRX Capability		9.2.2.64	FDD only	YES	ignore
>Max UE DTX Cycle C-	-DTX- PRXCapa ility	9.2.2.95	FDD only	YES	ignore
>Continuous Packet O Connectivity HS-SCCH less Capability		9.2.2.65	FDD only	YES	ignore
>MIMO Capability	0	9.2.1.118	FDD and 1.28Mcps TDD only	YES	ignore
>SixtyfourQAM DL O Capability	)	9.2.1.110	FDD and 1.28Mcps TDD only	YES	ignore
>MBMS Capability O	)	9.2.1.86		YES	ignore
>Enhanced FACH O Capability		9.2.1.114	FDD and 1.28Mcps TDD only	YES	ignore
F/	nhanced ACHCap bility	9.2.1.115	FDD and 1.28Mcps TDD only	YES	ignore
>SixteenQAM UL Capability O		9.2.2.88	FDD only	YES	ignore
>HS-DSCH MAC-d PDU O Size Capability	)	9.2.1.31IC		YES	ignore
>MBSFN Only Mode O Capability	)	9.2.3.71	1.28Mcps TDD only	YES	ignore
>F-DPCH Slot Format O Capability	)	9.2.2.94	FDD only	YES	ignore
>E-DCH MAC-d PDU Size O Capability	)	9.2.1.74A		YES	ignore
>Common E-DCH O Capability		9.2.2.101	FDD only	YES	Ignore
>E-Al Capability C-C-D-C-C-D-C-C-C-C-C-C-C-C-C-C-C-C-C-C	commonE CHCapa ility	9.2.2.102	FDD only	YES	Ignore
>Enhanced UE DRX O Capability		9.2.1.116	FDD only	YES	ignore
>Enhanced UE DRX O	)	9.2.1.116	1.28Mcps	YES	ignore

Capability LCR				TDD only		
>E-DPCCH Power Boosting Capability	0		9.2.2.109		YES	ignore
>SixtyfourQAM DL and MIMO Combined Capability	0		9.2.1.121	FDD and 1.28Mcps TDD only only	YES	ignore
>Multi Cell Capability Info	0		9.2.2.113	FDD only	YES	ignore
>Semi-Persistent scheduling Capability LCR	0		9.2.3.91	1.28Mcps TDD only	YES	ignore
>Continuous Packet Connectivity DRX Capability LCR	0		9.2.3.92	1.28Mcps TDD only	YES	ignore
>Common E-DCH HS- DPCCH Capability	C- CommonE DCHCapa bility		9.2.2.116	FDD only	YES	Ignore
>MIMO Power Offset For S- CPICH Capability	0		9.2.2.118	FDD only	YES	ignore
>TX Diversity on DL Control Channels by MIMO UE Capability	0		9.2.2.121	FDD only	YES	ignore
>Cell Capability Container	0		9.2.2.122	FDD only	YES	ignore
>Precoding Weight Set Restriction	0		9.2.2.124	FDD only	YES	ignore
Local Cell Group Information		0 <maxlo calCellinN ode B&gt;</maxlo 			EACH	ignore
>Local Cell Group ID	М		9.2.1.37A		_	
>DL Or Global Capacity Credit	М		9.2.1.20B		-	
>UL Capacity Credit	0		9.2.1.65A		-	
>Common Channels Capacity Consumption Law	М		9.2.1.9A		_	
>Dedicated Channels Capacity Consumption Law	М		9.2.1.20A		_	
>E-DCH Capacity Consumption Law	0		9.2.2.13Ja	FDD only	YES	ignore
>E-DCH TDD Capacity Consumption Law	0		9.2.3.60	TDD only	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Power Local Cell Group Information		0 <maxlo calCellinN ode B&gt;</maxlo 			EACH	ignore
>Power Local Cell Group ID	М		9.2.1.49B		_	
>Maximum DL Power Capability	М		9.2.1.39		- Litiona 1 to 9 a	

NOTE 1: This information element is a simplified representation of the ASN.1. [TDD - Repetitions 1 to 8 and repetitions 9 to maxSCCPCHCell are represented by separate ASN.1 structures.] Furthermore, maxSCCPCHCell has different values in the ASN.1 for FDD and for each of the two TDD options.

NOTE 2: For 1.28Mcps TDD when using multiple frequencies, this information element for Repetition 1 and repetition 2 through maxFrequencyinCell are represented by respective ASN.1 structures with different criticalities.

Condition	Explanation
EDCHCapability	The IE shall be present if the E-DCH Capability IE is set to "E-DCH
	Capable".
EnhancedFACHCapability	The IE shall be present if the Enhanced FACH Capability IE is set to
	"Enhanced FACH Capable".
DTX-DRXCapability	The IE shall be present if the Continuous Packet Connectivity DTX-DRX
	Capability IE is present and set to "Continuous Packet Connectivity
	DTX-DRX Capable".
CommonEDCHCapability	The IE shall be present if the Common E-DCH Capability IE is set to
	"Common E-DCH Capable".

Range Bound	Explanation
maxCellinNode B	Maximum number of Cells that can be configured in Node B
maxCCPinNode B	Maximum number of Communication Control Ports that can exist in the Node B
maxLocalCellinNode B	Maximum number of Local Cells that can exist in the Node B
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
maxSCCPCHCell	Maximum number of Secondary CCPCHs that can be defined in a Cell.
maxSCCPCHCell768	Maximum number of Secondary CCPCHs that can be defined in a Cell for 7.68 Mcps TDD.
maxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxPRACHCell	Maximum number of PRACHs that can be defined in a Cell
maxRACHCell	Maximum number of RACHs that can be defined in a Cell
maxFPACHCell	Maximum number of FPACHs that can be defined in a Cell
maxPLCCHCell	Maximum number of PLCCHs that can be defined in a Cell
maxE-RUCCHCell	Maximum number of E-RUCCHs that can be defined in a Cell
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

## 9.1.17A AUDIT FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality diagnostics	0		9.2.1.17		YES	ignore

# 9.1.18 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	reject
CHOICE Common	M				YES	reject
Measurement Object Type						
>Cell						
>>C-ID	M		9.2.1.9		_	
>>Time Slot	0		9.2.3.23	Applicable to 3.84McpsTDD and 7.68Mcps TDD only	-	
>>Time Slot LCR	0		9.2.3.24A	Applicable to 1.28Mcps TDD only	YES	reject
>>Neighbouring Cell Measurement Information		0 <maxno MeasNCell s&gt;</maxno 			GLOBAL	ignore
>>>CHOICE Neighbouring Cell Measurement Information					_	
>>>>Neighbouring FDD Cell Measurement Information				FDD only		
>>>>Neighbouring FDD Cell Measurement Information	M		9.2.1.47C		_	
>>>Neighbouring TDD Cell Measurement Information				Applicable to 3.84Mcps TDD only		
>>>>Neighbouring TDD Cell Measurement Information	М		9.2.1.47D		_	
>>>>Additional Neighbouring Cell Measurement Information				See Note 1		
>>>>Neighbouring TDD Cell Measurement Information LCR				Applicable to 1.28Mcps TDD only		
>>>>>Neighbouri ng TDD Cell Measurement Information LCR	M		9.2.1.47E		YES	reject
>>>>Neighbouring TDD Cell Measurement Information 768Mcps				Applicable to 7.68 Mcps TDD only		
>>>>Neighbouri ng TDD Cell Measurement Information 768Mcps	M		9.2.3.37		YES	reject
>>UARFCN	0		9.2.1.65	Applicable for 1.28 Mcps TDD only	YES	reject

>>UpPCH Position LCR	0		9.2.3.4Q	Applicable to 1.28Mcps TDD only	YES	reject
>>Additional Time Slot LCR		0 <maxfr equencyin Cell – 1&gt;</maxfr 		Applicable to 1.28Mcps TDD only. If the IE present, the measurement type should also be applied to the time slot (s).	GLOBAL	ignore
>>>UARFCN	M		9.2.1.65		_	
>>>Time Slot Initiated LCR		06		If the value is zero, the measurement type should be applied to all time slots in the UARFCN which satisfies the requirement of the measurement type		
>>>Time Slot LCR	М		9.2.3.24A		_	
>RACH				FDD only		
>>C-ID	М		9.2.1.9		_	
>>Common Transport	M		9.2.1.14		_	
Channel ID	I IVI		J.Z.1.14			
>Not Used			NULL	This choice		
>Additional Common				shall not be used. Reject procedure if received. See Note 1		
				Oce Note 1		
Measurement Object Types >>Power Local Cell Group					_	
>>>Power Local Cell	М		9.2.1.49B		YES	roject
Group ID >>E-DCH RACH	IVI		9.2.1.496	FDD only	163	reject
>>E-DCH RACH >>>C-ID	M		9.2.1.9	טוווט טט ז	YES	roicat
						reject
Common Measurement Type Measurement Filter	M O		9.2.1.11		YES	reject
Coefficient			9.2.1.41		YES	reject
Report Characteristics	M		9.2.1.51		YES	reject
SFN Reporting Indicator	M		FN Reporting Indicator 9.2.1.29B		YES	reject
SFN	0		9.2.1.53A		YES	reject
Common Measurement Accuracy	0		9.2.1.9B		YES	reject
Measurement Recovery Behavior	0		9.2.1.43A		YES	ignore
RTWP* Reporting Indicator	0		9.2.1.53b		YES	reject
RTWP* for Cell Portion	0		9.2.1.53c		YES	reject
Reporting Indicator Reference Received Total	0		9.2.2.39C	FDD only	YES	ignore
Wide Band Power Reporting						
GANSS Time ID	0		9.2.1.104a	This IE may only be present if the Common Measurement Type IE is set	YES	ignore

to "UTRAN
GANSS Timing
of Cell Frames
for UE
Positioning". If
the Common
Measurement
Type IE is set
to "UTRAN
GANSS Timing
of Cell Frames
for UE
Positioning"
and this IE is
absent, the
GANSS time is
Galileo system
time.

NOTE 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

Range Bound	Explanation
maxnoMeasNCells	Maximum number of neighbouring cells that can be measured on.
maxFrequencyinCell – 1	Maximum number of frequencies that can be used in the cell minus 1.

# 9.1.19 COMMON MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	10,000
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Common Measurement Object Type	Ö			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
>Cell						
>>Common Measurement Value	M		9.2.1.12		_	
>>Additional Measurement Value		0 <maxfr equencyin Cell&gt;</maxfr 		Applicable to 1.28Mcps TDD only. The Common Measurement Value Information in additional time slot will be reported if the number of Additional Time Slot LCR is not 0 in COMMON MEASUREME NT INITIATION REQUEST.	GLOBAL	ignore
>>>UARFCN	М		9.2.1.65	INEQUEUT.	_	
>>>Time Slot	IVI	16	9.2.1.03		_	
Measurement Value LCR		10			_	
>>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Common	М		9.2.1.12		_	
Measurement Value						
>RACH				FDD only		
>>Common Measurement	М		9.2.1.12	1 22 01119	_	
Value	'*'		0.2.1.12			
>Not Used			NULL	This choice shall not be used.		
>Additional Common Measurement Object Types				See Note 1		
>>Power Local Cell Group					_	
>>>Common Measurement Value	M		9.2.1.12		YES	ignore
>>E-DCH RACH				FDD only		
>>>Common Measurement Value	M		9.2.1.12		YES	ignore
SFN	0		9.2.1.53A	Common Measurement Time Reference	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Common Measurement Achieved Accuracy	0		Common Measureme nt Accuracy 9.2.1.9B		YES	ignore
Measurement Recovery	0		9.2.1.43C		YES	ignore

Support Indicator					
Reference Received Total Wide Band Power Support Indicator	0	9.2.2.39D	FDD only	YES	ignore
Reference Received Total Wide Band Power	0	9.2.2.39B	FDD only	YES	ignore

NOTE 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocollE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

Range Bound	Explanation
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell.

#### 9.1.20 COMMON MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.21 COMMON MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		ı	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Common Measurement Object Type	M			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
>Cell	N 4		0.04.404			
>>Common Measurement Value Information	М		9.2.1.12A		_	
>>C-ID	0		9.2.1.9		YES	ignore
>>Additional Measurement Value Information		0 <maxfr equencyin Cell&gt;</maxfr 		Applicable to 1.28Mcps TDD only. The Common Measurement Value Information in additional time slot will be reported if the number of Additional Time Slot LCR is not 0 COMMON MEASUREME NT INITIATION REQUEST.	GLOBAL	ignore
>>>UARFCN			9.2.1.65			
>>>Time Slot Measurement Value LCR		16				
>>>>Time Slot LCR	М		9.2.3.24A			
>>>>Common Measurement Value Information	М		9.2.1.12A			
>RACH				FDD only		
>>Common Measurement Value Information	М		9.2.1.12A		_	
>>C-ID	0		9.2.1.9		YES	ignore
>Not Used			NULL	This choice shall not be used.		
>Additional Common Measurement Object Types				See Note 1		
>>Power Local Cell Group					_	
>>>Common Measurement Value Information	М		9.2.1.12A		YES	ignore
>>E-DCH RACH				FDD only		
>>>Common Measurement Value Information	M		9.2.1.12A		YES	ignore
SFN	0		9.2.1.53A	Common Measurement Time Reference	YES	ignore
Measurement Recovery	0		9.2.1.43B		YES	ignore

Reporting Indicator							
Reference Received Total	0		9.2.2.39B	FDD only	YES	ignore	
Wide Band Power				-			
NOTE 1: This information element is a simplified representation of the ASN.1. The choice is performed through the							

NOTE 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocollE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

Range Bound	Explanation				
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell.				

#### 9.1.22 COMMON MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore

#### 9.1.23 COMMON MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

# 9.1.24 CELL SETUP REQUEST

#### 9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
T Cell	M		9.2.2.49		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nu [14]	YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nd [14]	YES	reject

Maximum Transmission Power	М		9.2.1.40		YES	reject
Closed Loop Timing Adjustment Mode	0		9.2.2.2A		YES	reject
Primary Scrambling Code	M		9.2.2.34		YES	reject
Synchronisation	IVI	1	3.2.2.04		YES	reject
Configuration		'			120	reject
>N_INSYNC_IND	М		9.2.1.47A		_	
>N_OUTSYNC_IND	M		9.2.1.47B		_	
>T_RLFAILURE	M		9.2.1.56A		_	
DL TPC Pattern 01 Count	M		9.2.2.13A		YES	reject
Primary SCH Information	IVI	1	3.2.2.13A		YES	reject
>Common Physical	М	'	9.2.1.13		-	reject
Channel ID						
>Primary SCH Power	M		DL Power 9.2.1.21		_	
>TSTD Indicator	M		9.2.1.64		-	
Secondary SCH Information		1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		-	
>Secondary SCH Power	М		DL Power		_	
			9.2.1.21			
>TSTD Indicator	М		9.2.1.64		_	
Primary CPICH Information		1			YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	,
>Primary CPICH power	М		9.2.2.33		_	
>Transmit Diversity	M		9.2.2.53		_	
Indicator					E4011	
Secondary CPICH Information		0 <maxs CPICHCell &gt;</maxs 			EACH	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>DL Scrambling Code	М		9.2.2.13		_	
>FDD DL Channelisation Code Number	M		9.2.2.14		_	
>Secondary CPICH Power	М		DL Power		_	
Tono and Discoults	N 4		9.2.1.21			
>Transmit Diversity Indicator	M		9.2.2.53		_	
Primary CCPCH Information		1			YES	reject
>Common Physical	М		9.2.1.13		-	
Channel ID						
>BCH Information		1	00111		_	
>>Common Transport Channel ID	М		9.2.1.14		_	
>>BCH Power	M		DL Power 9.2.1.21		_	
>STTD Indicator	М		9.2.2.48		_	
Limited Power Increase Information		1			YES	reject
>Power_Raise_Limit	М		9.2.2.29A		_	
>DL_power_averaging_win dow_size	M		9.2.2.12A		_	
IPDL Parameter Information		01			YES	reject
>IPDL FDD Parameters	M	U 1	9.2.2.18C		1E9 -	reject
>IPDL FDD Parameters >IPDL Indicator	M		9.2.2.16C 9.2.1.36F		<u>-</u>	
Cell Portion Information	IVI	0 <maxno ofCellPorti ons&gt;</maxno 	9.2.1.00F		EACH	reject
>Cell Portion ID	M	01137	9.2.2.1Ca		_	
>Associated Secondary	M		Common		_	
CPICH			Physical Channel ID 9.2.1.13			
	i	i	,	i		1

>Maximum Transmission	М	Maximu	ım	_	
Power for Cell Portion		Transm	nissio		
		n Powe	er		
		9.2.1.40	0		
MIMO Pilot Configuration	0	9.2.2.73	3	YES	reject
MIMO Pilot Configuration	0	9.2.2.12	20 Can only be	YES	reject
Extension			present if the		
			MIMO Pilot		
			Configuration		
			IE is present		

Range Bound	Explanation
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
MaxNoofCellPortions	Maximum number of Cell Portions in a cell

# 9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation Id	M		9.2.1.16		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nt [15] For 1.28Mcps TDD, if multiple frequencies exist within the cell indicated by C-ID, this IE indicates the frequency of Primary Frequency.	YES	reject
Cell Parameter ID	M		9.2.3.4	For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, this IE indicates the preamble code used in the MBSFN Special Time Slot [19].	YES	reject
Maximum Transmission Power	M		9.2.1.40		YES	reject
Transmission Diversity Applied	M		9.2.3.26		YES	reject
Sync Case	M		9.2.3.18		YES	reject
Synchronisation Configuration		1			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		_	
>N_OUTSYNC_IND	M		9.2.1.47B		_	
>T_RLFAILURE	М		9.2.1.56A		_	
DPCH Constant Value	М		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
PUSCH Constant Value	М		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
PRACH Constant Value	М		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
Timing Advance Applied	М		9.2.3.22A		YES	reject
SCH Information		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>CHOICE Sync Case >>Case 1	M				YES	reject
>>>Time Slot >>Case 2	M		9.2.3.23		_	
>>>SCH Time Slot	М		9.2.3.17		_	

>SCH Power	M		DL Power		_	
			9.2.1.21			
>TSTD Indicator	M		9.2.1.64		_	
PCCPCH Information		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD.	YES	reject
>Common Physical Channel ID	М		9.2.1.13		-	
>TDD Physical Channel Offset	М		9.2.3.20		_	
>Repetition Period	M		9.2.3.16		_	
>Repetition Length	M		9.2.3.15		_	
>PCCPCH Power	М		9.2.3.9		_	
>SCTD Indicator	M		9.2.3.30		_	
Time Slot Configuration		015		Mandatory for 3.84Mcps TDD and 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD.	GLOBAL	reject
>Time Slot	M		9.2.3.23		_	
>Time Slot Status	M		9.2.3.25		_	
>Time Slot Direction	M		9.2.3.24		_	
>MBSFN Cell Parameter ID	0		Cell Parameter ID 9.2.3.4		YES	reject
Time Slot Configuration LCR		07		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD. If multiple frequencies exist within the cell indicated by C-ID, this IE indicates the Time Slot configuration of Primary Frequency.	GLOBAL	reject
>Time Slot LCR	М		9.2.3.24A		_	
>Time Slot Status	M		9.2.3.25		_	
>Time Slot Direction	М		9.2.3.24		_	
>Time Slot Parameter ID	0		Cell Parameter ID 9.2.3.4	Applicable only to MBSFN only mode	YES	reject

PCCPCH Information LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD. For 1.28 Mcps TDD, if the cell	YES	reject
				is operating in MBSFN only mode, PCCPCH is deployed on the MBSFN Special Time Slot [19].		
>Common Physical Channel ID	М		9.2.1.13		_	
>TDD Physical Channel Offset	М		9.2.3.20		_	
>Repetition Period	M		9.2.3.16		_	
>Repetition Length	М		9.2.3.15		_	
>PCCPCH Power	M		9.2.3.9		-	
>SCTD Indicator	M		9.2.3.30		-	
>TSTD Indicator	M		9.2.1.64		_	
DwPCH Information		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>TSTD Indicator	М		9.2.1.64		_	
>DwPCH Power	M		9.2.3.5B		_	
Reference SFN Offset	0		9.2.3.14B		YES	ignore
IPDL Parameter Information		01		Applicable to 3.84 Mcps TDD and 7.68 Mcps TDD only	YES	reject
>IPDL TDD Parameters	М		9.2.3.5D		_	
>IPDL Indicator	М		9.2.1.36F		_	
IPDL Parameter Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>IPDL TDD Parameters LCR	М		9.2.3.5H		_	
>IPDL Indicator	М		9.2.1.36F		_	

PCCPCH Information 7.68 Mcps TDD		01		Mandatory for 7.68 Mcps TDD. Not Applicable to 1.28Mcps TDD or 3.84 Mcps TDD.	YES	reject
>Common Physical Channel ID 7.68 Mcps	М		9.2.3.33	TDD.	_	
>TDD Physical Channel Offset	М		9.2.3.20		_	
>Repetition Period	M		9.2.3.16		_	
>Repetition Length	M		9.2.3.15		_	
>PCCPCH Power	М		9.2.3.9		_	
>SCTD Indicator	M		9.2.3.30		_	
SCH Information 7.68Mcps TDD		01		Mandatory for 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD or 3.84Mcps TDD.	YES	reject
>Common Physical Channel ID 7.68Mcps	M		9.2.3.33		-	
>CHOICE Sync Case	М				YES	reject
>>Case 1						
>>>Time Slot	M		9.2.3.23		_	
>>Case 2	1		0.00.47			
>>>SCH Time Slot	M		9.2.3.17		_	
>SCH Power	М		DL Power 9.2.1.21		_	
>TSTD Indicator	M		9.2.1.64		-	
MBSFN Only Mode Indicator	0		9.2.3.70	Mandatory for 1.28Mcps TDD when the cell is operating in MBSFN only mode. Not applicable to FDD, 3.84Mcps TDD or 7.68Mcps TDD	YES	reject
UARFCN Information LCR		0 <maxfreq uencyinCe II-1&gt;</maxfreq 		Mandatory for 1.28Mcps TDD when using multiple frequencies. It indicates the UARFCN and Time Slot configuration information of the Secondary Frequencies. There could be several secondary frequencies	EACH	reject
>UARFCN	М		9.2.1.65	Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency.	-	
>Time Slot Configuration LCR		17		This IE indicates the Time Slot	-	

			configuration of a Secondary Frequency.		
>>Time Slot LCR	M	9.2.3.24A		1	
>>Time Slot Status	M	9.2.3.25		1	
>>Time Slot Direction	M	9.2.3.24		1	
>>Time Slot Parameter ID	0	Cell		YES	reject
		Parameter			
		ID			
		9.2.3.4			

Range Bound	Explanation
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

## 9.1.25 CELL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.26 CELL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.27 CELL RECONFIGURATION REQUEST

## 9.1.27.1 FDD Message

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
Managara Diagripain atau	M		9.2.1.45			
Message Discriminator	M		9.2.1.46		YES	raigat
Message Type					150	reject
Transaction ID	M		9.2.1.62			
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID  Maximum Transmission	M O		9.2.1.16 9.2.1.40		YES YES	reject
Power	0		9.2.1.40		YES	reject
Synchronisation		01			YES	reject
Configuration		01			163	reject
>N_INSYNC_IND	М		9.2.1.47A		_	
>N_OUTSYNC_IND	M		9.2.1.47B		_	
>T_RLFAILURE	M		9.2.1.56A		_	
Primary SCH Information	141	01	0.2.1.00/1		YES	reject
>Common Physical	М	01	9.2.1.13		-	10,000
Channel ID	'*'		0.2.1.10			
>Primary SCH Power	М		DL Power		_	
21 milary Corrections	'''		9.2.1.21			
Secondary SCH Information		01			YES	reject
>Common Physical	М		9.2.1.13		_	,
Channel ID						
>Secondary SCH Power	M		DL Power		_	
			9.2.1.21			
Primary CPICH Information		01			YES	reject
>Common Physical	M		9.2.1.13		_	
Channel ID						
>Primary CPICH Power	M		9.2.2.33		_	
Secondary CPICH		0 <maxs< td=""><td></td><td></td><td>EACH</td><td>reject</td></maxs<>			EACH	reject
Information		CPICHCell				
		>				
>Common Physical	М		9.2.1.13		_	
Channel ID			51.5			
>Secondary CPICH Power	М		DL Power		_	
Drim and CODOLL		0.4	9.2.1.21		VE0	
Primary CCPCH Information		01			YES	reject
>BCH Information		1				
>>Common Transport	M	1	9.2.1.14		_	
Channel ID	IVI		9.2.1.14		_	
>>BCH Power	M	1	DL Power		_	1
//DOITI OWEI	I IVI		9.2.1.21			
IPDL Parameter Information		01	J.L.1.L1		YES	reject
>IPDL FDD Parameters	0	5	9.2.2.18C			. 0,000
>IPDL Indicator	M		9.2.1.36F		_	1
Cell Portion Information		0 <maxno< td=""><td>3.233.</td><td></td><td>EACH</td><td>reject</td></maxno<>	3.233.		EACH	reject
		ofCellPorti				. 5,550
		ons>				
>Cell Portion ID	М		9.2.2.1Ca		_	
>Maximum Transmission	М		Maximum		-	
Power for Cell Portion			Transmissio			
			n Power			1
			9.2.1.40			
MIMO Pilot Configuration	0		9.2.2.73		YES	reject
MIMO Pilot Configuration	0		9.2.2.120		YES	reject
Extension	1					

Range Bound	Explanation
maxSCPICHCell	Maximum number of Secondary CPICH that can be defined in a Cell.

# 9.1.27.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	-
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
Synchronisation Configuration		01			YES	reject
>N_INSYNC_IND	М		9.2.1.47A		_	
>N_OUTSYNC_IND	М		9.2.1.47B		_	
>T_RLFAILURE	M		9.2.1.56A		_	
Timing Advance Applied	0		9.2.3.22A		YES	reject
SCH Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>SCH Power	М		DL Power 9.2.1.21		_	
PCCPCH Information		01		Not applicable to 7.68Mcps TDD only. For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, PCCPCH is deployed on the MBSFN Special Time Slot [19].	YES	reject
>Common Physical Channel ID	М		9.2.1.13		-	
>PCCPCH Power	M		9.2.3.9		_	_
Maximum Transmission Power	0		9.2.1.40		YES	reject
DPCH Constant Value	0		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
PUSCH Constant Value	0		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
PRACH Constant Value	0		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
Time Slot Configuration		015		Mandatory for 3.84Mcps TDD and 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD.	GLOBAL	reject
>Time Slot	M		9.2.3.23		_	
>Time Slot Status	M		9.2.3.25		_	
>Time Slot Direction	M		9.2.3.24		_	
>MBSFN Cell Parameter ID	0		Cell Parameter ID 9.2.3.4		YES	reject

			1	1		
Time Slot Configuration LCR		07		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD. If multiple frequencies exist within the cell indicated by C-ID, this IE indicates the Time Slot reconfiguration of Primary	GLOBAL	reject
Ti 01 (1 0 D			0.00044	Frequency.		
>Time Slot LCR	M		9.2.3.24A		_	
>Time Slot Status >Time Slot Direction	M		9.2.3.25 9.2.3.24		_	
DwPCH Information	IVI	01	9.2.3.24	Applicable to 1.28Mcps TDD	YES	reject
>Common Physical Channel ID	M		9.2.1.13	only.	_	
>DwPCH Power	М		9.2.3.5B		_	
IPDL Parameter Information		01		Applicable to 3.84Mcps TDD and 7.68Mcps TDD only	YES	reject
>IPDL TDD Parameters	0		9.2.3.5D		_	
>IPDL Indicator	M		9.2.1.36F		_	
IPDL Parameter Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>IPDL TDD Parameters LCR	0		9.2.3.5H		-	
>IPDL Indicator SCH Information 7.68Mcps	M	01	9.2.1.36F	Applicable to 7.68Mcps TDD	YES	reject
>Common Physical Channel ID 7.68Mcps	M		9.2.3.33	only	_	
>SCH Power	М		DL Power 9.2.1.21		-	
PCCPCH Information 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	reject
>Common Physical Channel ID 7.68Mcps	M		9.2.3.33		_	
>PCCPCH Power	M		9.2.3.9		_	
CHOICE UARFCN Adjustment	0			Applicable to 1.28Mcps TDD when using multiple frequencies	YES	reject
>Add >>UARFCN Information		1			_	
To Add LCR >>>UARFCN	M		9.2.1.65	Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency to add.	-	

Time Olet	T	1 4 7	1	I TI : IF		
>>>Time Slot		17		This IE	_	
Configuration LCR				indicates the		
				Time Slot		
				configuration of		
				a Secondary		
				Frequency to		
				add.		
>>>>Time Slot LCR	М		9.2.3.24A		_	
>>>>Time Slot Status	M		9.2.3.25		_	
>>>>Time Slot	M		9.2.3.24		_	
Direction						
>Modify						
>>UARFCN Information		1		there could be	_	
To Modify LCR		<maxfreq< td=""><td></td><td>several</td><td></td><td></td></maxfreq<>		several		
		uencyinCe		secondary		
		II-1>		frequencies		
>>>UARFCN	М		9.2.1.65	Corresponds to	_	
>>>OAKI CIN			0.200	Nt [15]		
				This IE		
				indicates the		
				frequency of a		
				Secondary		
				Frequency to		
>>>Time Slot		4 7		modify.		
		17		This IE	_	
Configuration LCR				indicates the		
				Time Slot		
				reconfiguration		
				of a Secondary		
				Frequency to		
				modify.		
>>>>Time Slot LCR	M		9.2.3.24A		_	
>>>>Time Slot Status	M		9.2.3.25		_	
>>>Time Slot	M		9.2.3.24		_	
Direction						
>Delete						
>>UARFCN Information		1			_	
To Delete LCR						
>>>UARFCN	M		9.2.1.65	Corresponds to	_	
				Nt [15]		
				This IÉ		
				indicates the		
				frequency of		
				Secondary		
				Frequency to		
				delete.		
	I .	1	I	acicio.	I	

Range Bound	Explanation
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

## 9.1.28 CELL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.29 CELL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.30 CELL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
wessage Discriminator						
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject

### 9.1.31 CELL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.32 RESOURCE STATUS INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CHOICE Indication Type	M				YES	ignore
>No Failure						
>>Local Cell Information		1 <max LocalCellin Node B&gt;</max 			EACH	ignore
>>>Local Cell ID	M		9.2.1.38		_	
>>>Add/Delete Indicator	M		9.2.1.1		_	
>>>DL Or Global Capacity Credit	C-add		9.2.1.20B		_	
>>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels Capacity Consumption Law	C-add		9.2.1.9A		-	
>>>Dedicated Channels Capacity Consumption Law	C-add		9.2.1.20A		-	
>>>Maximum DL Power Capability	C-add		9.2.1.39		-	
>>>Minimum Spreading Factor	C-add		9.2.1.47		_	
>>>Minimum DL Power Capability	C-add		9.2.1.46A		-	
>>>Local Cell Group ID	0		9.2.1.37A		_	
>>>Reference Clock Availability	0		9.2.3.14A	TDD only	YES	ignore
>>>Power Local Cell Group ID	0		9.2.1.49B		YES	ignore
>>>HSDPA Capability	0		9.2.1.31Ga		YES	ignore
>>>E-DCH Capability	0		9.2.1.70		YES	ignore
>>>E-DCH TTI2ms Capability	C- EDCHCap ability		9.2.2.13V	FDD only	YES	ignore
>>>E-DCH SF Capability	C- EDCHCap ability		9.2.2.13W	FDD only	YES	ignore
>>>E-DCH HARQ Combining Capability	C- EDCHCap ability		9.2.2.13X	FDD only	YES	ignore
>>>E-DCH Capacity Consumption Law	0		9.2.2.13Ja	FDD only	YES	ignore
>>>F-DPCH Capability	0		9.2.2.16a	FDD only	YES	ignore
>>>E-DCH TDD Capacity Consumption Law	0		9.2.3.60	TDD only	YES	ignore
>>>Continuous Packet Connectivity DTX-DRX Capability	0		9.2.2.64	FDD only	YES	ignore
>>>Max UE DTX Cycle	C-DTX- DRXCapa bility		9.2.2.95	FDD only	YES	ignore

>>>Continuous Packet Connectivity HS-SCCH less Capability	0	9.2.2.65	FDD only	YES	ignore
>>>MIMO Capability	0	9.2.1.118	FDD and 1.28Mcps TDD only	YES	ignore
>>>SixtyfourQAM DL Capability	0	9.2.1.110	FDD and 1.28Mcps TDD only	YES	ignore
>>>MBMS Capability	0	9.2.1.86	Only	YES	ignore
>>>Enhanced FACH Capability	0	9.2.1.114	FDD and 1.28Mcps TDD only	YES	ignore
>>>Enhanced PCH Capability	C- Enhanced FACHCap ability	9.2.1.115	FDD and 1.28Mcps TDD only	YES	ignore
>>>SixteenQAM UL Capability	0	9.2.2.88	FDD only	YES	ignore
>>>HS-DSCH MAC-d PDU Size Capability	0	9.2.1.31IC		YES	ignore
>>>MBSFN Only Mode Capability	0	9.2.3.71	1.28Mcps TDD only	YES	ignore
>>>F-DPCH Slot Format Capability	0	9.2.2.94	FDD only	YES	ignore
>>>E-DCH MAC-d PDU Size Capability	0	9.2.1.74A		YES	ignore
>>>Common E-DCH Capability	0	9.2.2.101	FDD only	YES	Ignore
>>E-Al Capability	C- CommonE DCHCapa bility	9.2.2.102	FDD only	YES	Ignore
>>>Enhanced UE DRX Capability	0	9.2.1.116	FDD only	YES	ignore
>>>Enhanced UE DRX Capability LCR	0	9.2.1.116	1.28Mcps TDD only	YES	ignore
>>>E-DPCCH Power Boosting Capability	0	9.2.2.109		YES	ignore
>>>SixtyfourQAM DL and MIMO Combined Capability	0	9.2.1.121	FDD and 1.28Mcps TDD only	YES	ignore
>>>Multi Cell Capability Info	0	9.2.2.113	FDD only	YES	ignore
>>>Semi-Persistent scheduling Capability LCR	0	9.2.3.91	1.28Mcps TDD only	YES	ignore
>>>Continuous Packet Connectivity DRX Capability LCR	0	9.2.3.92	1.28Mcps TDD only	YES	ignore
>>>Common E-DCH HS-DPCCH Capability	C- CommonE DCHCapa bility	9.2.2.116	FDD only	YES	Ignore
>>>MIMO Power Offset For S-CPICH Capability	0	9.2.2.118	FDD only	YES	ignore
>>>TX Diversity on DL Control Channels by MIMO UE Capability	0	9.2.2.121	FDD only	YES	ignore
>>>Cell Capability Container	0	9.2.2.122	FDD only	YES	ignore

>>>Precoding Weight Set Restriction	0		9.2.2.124	FDD only	YES	ignore
>>Local Cell Group Information		0 <maxlo calCellinN ode B&gt;</maxlo 			EACH	ignore
>>>Local Cell Group ID	M		9.2.1.37A		-	
>>>DL Or Global Capacity Credit	М		9.2.1.20B		-	
>>>UL Capacity Credit	0		9.2.1.65A		-	
>>>Common Channels Capacity Consumption Law	М		9.2.1.9A		-	
>>>Dedicated Channels Capacity Consumption Law	М		9.2.1.20A		_	
>>>E-DCH Capacity Consumption Law	0		9.2.2.13Ja	FDD only	YES	ignore
>>>E-DCH TDD Capacity Consumption Law	0		9.2.3.60	TDD only	YES	ignore
>>Power Local Cell Group Information		0 <maxlo calCellinN ode B&gt;</maxlo 			EACH	ignore
>>>Power Local Cell Group ID	М		9.2.1.49B		_	
>>>Maximum DL Power Capability	M		9.2.1.39		_	
>Service Impacting >>Local Cell Information		0 <maxlo calCellinN</maxlo 			EACH	ignore
>>>Local Cell ID	M	ode B>	9.2.1.38			
>>>DL Or Global	0		9.2.1.20B		_	
Capacity Credit >>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels Capacity Consumption Law	0		9.2.1.9A		-	
>>>Dedicated Channels Capacity Consumption Law	0		9.2.1.20A		-	
>>>Maximum DL Power Capability	0		9.2.1.39		_	
>>>Minimum Spreading Factor	0		9.2.1.47		_	
>>>Minimum DL Power Capability	0		9.2.1.46A		_	
>>>Reference Clock Availability	0		9.2.3.14A	TDD only	YES	ignore
>>>HSDPA Capability	0		9.2.1.31Ga		YES	ignore
>>>E-DCH Capability	0		9.2.1.70		YES	ignore
>>>E-DCH TTI2ms Capability	C- EDCHCap ability		9.2.2.13V	FDD only	YES	ignore
>>>E-DCH SF Capability	C- EDCHCap ability		9.2.2.13W	FDD only	YES	ignore
>>>E-DCH HARQ	C- EDCHCap		9.2.2.13X	FDD only	YES	ignore

		1000101	T = D D	\/=0	
>>>E-DCH Capacity Consumption Law	0	9.2.2.13Ja	FDD only	YES	ignor
>>>F-DPCH Capability	0	9.2.2.16a		YES	ignor
>>>E-DCH TDD Capacity Consumption	0	9.2.3.60	TDD only	YES	ignoi
Law					
>>>Continuous Packet Connectivity DTX-DRX Capability	0	9.2.2.64	FDD only	YES	igno
>>>Max UE DTX Cycle	C-DTX- DRXCapa bility	9.2.2.95	FDD only	YES	igno
>>>Continuous Packet Connectivity HS-SCCH less Capability	0	9.2.2.65	FDD only	YES	igno
>>>MIMO Capability	0	9.2.1.118	FDD and 1.28Mcps TDD only	YES	igno
>>>SixtyfourQAM DL Capability	0	9.2.1.110	FDD and 1.28Mcps TDD only	YES	igno
>>>MBMS Capability	0	9.2.1.86		YES	igno
>>>Enhanced FACH Capability	0	9.2.1.114	FDD only and 1.28Mcps TDD	YES	igno
>>>Enhanced PCH Capability	C- Enhanced FACHCap ability	9.2.1.115	FDD only and 1.28Mcps TDD	YES	igno
>>>SixteenQAM UL Capability	O	9.2.2.88	FDD only	YES	igno
>>>HS-DSCH MAC-d PDU Size Capability	0	9.2.1.31IC		YES	igno
>>>MBSFN Only Mode Capability	0	9.2.3.71	1.28Mcps TDD only	YES	igno
>>>F-DPCH Slot Format Capability	0	9.2.2.94	FDD only	YES	igno
>>>E-DCH MAC-d PDU Size Capability	0	9.2.1.74A		YES	igno
>>>Common E-DCH Capability	0	9.2.2.101	FDD only	YES	Igno
>>>E-AI Capability	C- CommonE DCHCapa bility	9.2.2.102	FDD only	YES	Igno
>>>Enhanced UE DRX Capability	0	9.2.2.107	FDD only	YES	igno
>>>Enhanced UE DRX Capability LCR	0	9.2.1.116	1.28Mcps TDD only	YES	igno
>>>E-DPCCH Power Boosting Capability	0	9.2.2.109		YES	igno
>>>SixtyfourQAM DL and MIMO Combined Capability	0	9.2.1.121	FDD and 1.28Mcps TDD only	YES	igno
>>>Multi Cell Capability Info	0	9.2.2.113	FDD only	YES	igno
>>>Semi-Persistent scheduling Capability	0	9.2.3.91	1.28Mcps TDD only	YES	igno

>>>Continuous Packet Connectivity DRX	0		9.2.3.92	1.28Mcps TDD only	YES	ignore
Capability LCR			0.0.0.440	EDD	VEO	1
>>>Common E-DCH HS-DPCCH Capability	C- CommonE DCHCapa bility		9.2.2.116	FDD only	YES	Ignore
>>>MIMO Power Offset For S-CPICH Capability	0		9.2.2.118	FDD only	YES	ignore
>>>TX Diversity on DL Control Channels by MIMO UE Capability	0		9.2.2.121	FDD only	YES	ignore
>>>Cell Capability Container	0		9.2.2.122	FDD only	YES	ignore
>>>Precoding Weight Set Restriction	0		9.2.2.124	FDD only	YES	ignore
>>Local Cell Group Information		0 <maxlo calCellinN ode B&gt;</maxlo 			EACH	ignore
>>>Local Cell Group ID	M		9.2.1.37A		_	
>>>DL Or Global Capacity Credit	0		9.2.1.20B		_	
>>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels Capacity Consumption Law	0		9.2.1.9A		-	
>>>Dedicated Channels Capacity Consumption Law	0		9.2.1.20A		-	
>>>E-DCH Capacity Consumption Law	0		9.2.2.13Ja	FDD only	YES	ignore
>>>E-DCH TDD Capacity Consumption Law	0		9.2.3.60	TDD only	YES	ignore
>>Communication Control Port Information		0 <maxc CPinNode B&gt;</maxc 			EACH	ignore
>>>Communication Control Port ID	M		9.2.1.15		-	
>>>Resource Operational State	M		9.2.1.52		ı	
>>>Availability Status	M		9.2.1.2		-	
>>Cell Information		0 <maxce IlinNode B&gt;</maxce 			EACH	ignore
>>>C-ID	M		9.2.1.9		ı	
>>>Resource Operational State	0		9.2.1.52		_	
>>>Availability Status	0		9.2.1.2		_	
>>>Primary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Secondary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore

>>>Primary CPICH	0		Common	FDD only	YES	ignore
Information			Physical Channel Status			
			Information 9.2.1.13A			
>>>Secondary CPICH Information		0 <maxs CPICHCell &gt;</maxs 		FDD only	EACH	ignore
>>>Secondary CPICH Individual	М		Common Physical		_	
Information			Channel			
			Status Information			
			9.2.1.13A		\/F0	
>>>Primary CCPCH Information	0		Common Physical		YES	ignore
momation			Channel Status			
			Information			
DOLL Information	0		9.2.1.13A Common		YES	ignore
>>>BCH Information			Transport		IES	ignore
			Channel Status			
			Information			
>>>Secondary CCPCH		0 <maxs< td=""><td>9.2.1.14B</td><td>See note 1</td><td>EACH</td><td>ignore</td></maxs<>	9.2.1.14B	See note 1	EACH	ignore
Information		CCPCHCe II>		below		
>>>>Secondary CCPCH Individual	M		Common Physical		_	
Information			Channel			
			Status Information			
501111			9.2.1.13A		YES	:
>>>PCH Information	0		Common Transport		YES	ignore
			Channel Status			
			Information			
DIOLLI (	0		9.2.1.14B Common		YES	ignore
>>>PICH Information			Physical		TES	ignore
			Channel Status			
			Information			
>>>FACH Information		0 <maxfa< td=""><td>9.2.1.13A</td><td></td><td>EACH</td><td>ignore</td></maxfa<>	9.2.1.13A		EACH	ignore
		CHCell>			LAOIT	ignore
>>>>FACH Individual Information	M		Common Transport		_	
iniomation			Channel			
			Status Information			
		0 .mayD	9.2.1.14B		FACIL	:
>>>PRACH Information		0 <maxp RACHCell</maxp 			EACH	ignore
	NA	>	Comman			
>>>PRACH Individual Information	M		Common Physical		_	
marriada miomidalon			Channel Status			
			Information			
DAOULE C		0 <maxp< td=""><td>9.2.1.13A</td><td></td><td>EACH</td><td>ianora</td></maxp<>	9.2.1.13A		EACH	ianora
>>>RACH Information		RACHCell			EACH	ignore
		>				1

>>>>RACH Individual Information	М		Common Transport Channel Status Information 9.2.1.14B		-	
>>>AICH Information		0 <maxp RACHCell &gt;</maxp 		FDD only	EACH	ignore
>>>>AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>>>Not Used 1	0		NULL	This item shall not be used. Ignore if received.	-	
>>>Not Used 2	0		NULL	This item shall not be used. Ignore if received.	-	
>>>Not Used 3	0		NULL	This item shall not be used. Ignore if received.	Ι	
>>>Not Used 4	0		NULL	This item shall not be used. Ignore if received.	ı	
>>>SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	Applicable to 3.84Mcps TDD only	YES	ignore
>>>FPACH Information		0 <maxfp ACHCell&gt;</maxfp 		Applicable to 1.28Mcps TDD only	EACH	ignore
>>>>FPACH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>DwPCH Information	0		Common Physical Channel Status Information 9.2.1.13A	Applicable to 1.28Mcps TDD only	YES	ignore
>>>HS-DSCH Resources Information		0 <maxfreq uencyinCe II&gt;</maxfreq 		See note 2 below	EACH	ignore
>>>Resource Operational State	М		9.2.1.52		-	
>>>Availability Status	М		9.2.1.2		-	
>>>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable to 1.28Mcps TDD when using multiple frequencies.	YES	ignore

>>>MICH Information	0		Common Physical		YES	ignore
			Channel Status Information 9.2.1.13A			
>>>E-DCH Resources Information		0 <maxfr equencyin Cell&gt;</maxfr 	3.2.1.10/(	See note 2 below	EACH	ignore
>>>Resource Operational State	M	Cell>	9.2.1.52		-	
>>>Availability Status	М		9.2.1.2		-	
>>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable to 1.28Mcps TDD when using multiple frequencies.	YES	ignore
>>>PLCCH Information		0 <maxpl CCHCell&gt;</maxpl 		Applicable to 1.28Mcps TDD only	EACH	ignore
>>>>PLCCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>>>Primary CCPCH Information 7.68Mcps	0		Common Physical Channel Status Information 7.68Mcps 9.2.3.36		YES	ignore
>>>Secondary CCPCH Information 7.68Mcps		0 <maxs CCPCHCe II768&gt;</maxs 			EACH	ignore
>>>>Secondary CCPCH Individual Information 7.68Mcps	M		Common Physical Channel Status Information 7.68Mcps 9.2.3.36		-	
>>>PICH Information 7.68Mcps	0		Common Physical Channel Status Information 7.68Mcps 9.2.3.36		YES	ignore
>>>PRACH Information 7.68Mcps		0 <maxp RACHCell &gt;</maxp 			EACH	ignore
>>>>PRACH Individual Information 7.68Mcps	М		Common Physical Channel Status Information 7.68Mcps 9.2.3.36		-	

>>>SCH Information 7.68Mcps	0		Common Physical Channel Status Information 7.68Mcps 9.2.3.36	Applicable to 7.68Mcps TDD only	YES	ignore
>>>MICH Information 7.68Mcps	0		Common Physical Channel Status Information 7.68Mcps 9.2.3.36		YES	ignore
>>>E-RUCCH Information		0 <maxe- RUCCHCe II&gt;</maxe- 		Applicable to 3.84Mcps TDD only	EACH	ignore
>>>E-RUCCH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>E-RUCCH Information 7.68Mcps		0 <maxe- RUCCHCe II&gt;</maxe- 		Applicable to 7.68Mcps TDD only	EACH	ignore
>>>E-RUCCH Individual Information 7.68Mcps	М		Common Physical Channel Status Information 7.68Mcps 9.2.3.36		-	
>>>UARFCN Information LCR		0 <maxfr equencyin Cell&gt;</maxfr 		Applicable to 1.28Mcps TDD when using multiple frequencies.	EACH	ignore
>>>UARFCN	М		9.2.1.65	Corresponds to Nt [15]	-	
>>>>Resource Operational State	М		9.2.1.52		-	
>>>>Availability Status	М		9.2.1.2		-	
>>>Cause	0		9.2.1.6		_	
>>>UpPCH Information LCR		0 <maxfr equencyin Cell&gt;</maxfr 	5.2	Applicable to 1.28Mcps TDD only.	EACH	ignore
>>>>UARFCN	0		9.2.1.65	Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt [15]	-	
>>>>UpPCH Position LCR	М		9.2.3.4Q	1, 1	-	
>>>Resource Operational State	М		9.2.1.52		-	
>>>Availability Status	М		9.2.1.2		-	
>>Power Local Cell		0 <maxlo< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxlo<>			EACH	ignore
Group Information		calCellinN ode B>				
>>>Power Local Cell Group ID	M		9.2.1.49B		_	

>>>Maximum DL Power	M	9.2.1.39	_	
Capability				
Cause	0	9.2.1.6	YES	ignore

NOTE 1: This information element is a simplified representation of the ASN.1. [TDD - Repetitions 1 to 8 and repetitions 9 to maxSCCPCHCell are represented by separate ASN.1 structures.] Furthermore, maxSCCPCHCell has different values in the ASN.1 for FDD and for each of the two TDD options.

NOTE 2: For 1.28Mcps TDD when using multiple frequencies, this information element for Repetition 1 and repetition 2 through maxFrequencyinCell are represented by respective ASN.1 structures with different criticalities.

Condition	Explanation
add	The IE shall be present if the Add/Delete Indicator IE is set to "Add".
EDCHCapability	The IE shall be present if the E-DCH Capability IE is set to "E-DCH
	Capable".
EnhancedFACHCapability	The IE shall be present if the Enhanced FACH Capability IE is set to
	"Enhanced FACH Capable".
DTX-DRXCapability	The IE shall be present if the Continuous Packet Connectivity DTX-DRX
	Capability IE is present and set to "Continuous Packet Connectivity
	DTX-DRX Capable".
CommonEDCHCapability	The IE shall be present if the Common E-DCH Capability IE is set to
	"Common E-DCH Capable".

Range Bound	Explanation
maxLocalCellinNode B	Maximum number of Local Cells that can exist in the Node B
maxCellinNode B	Maximum number of C-IDs that can be configured in the Node B
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
maxSCCPCHCell	Maximum number of Secondary CCPCHs that can be defined in a Cell.
maxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxPRACHCell	Maximum number of PRACHs and AICHs that can be defined in a Cell
maxCCPinNode B	Maximum number of Communication Control Ports that can exist in the
	Node B
maxFPACHCell	Maximum number of FPACHs that can be defined in a Cell
maxPLCCHCell	Maximum number of PLCCHs that can be defined in a Cell
maxE-RUCCHCell	Maximum number of E-RUCCHs that can be defined in a Cell
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

#### 9.1.33 SYSTEM INFORMATION UPDATE REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	

C-ID	M		9.2.1.9		YES	reject
BCCH Modification Time	0		9.2.1.3		YES	reject
MIB/SB/SIBInformation		1 <maxib &gt;</maxib 			GLOBAL	reject
>IB Type	M		9.2.1.35		_	
>IB OC ID	М		9.2.1.31A	In one message, every occurrence of IB Type can only be deleted once and/or added once.	_	
>CHOICE IB Deletion Indicator	М				_	
>>No Deletion						
>>>SIB Originator	C-SIB		9.2.1.55		_	
>>>IB SG REP	0		9.2.1.34		-	
>>>Segment Information		1 <maxib SEG&gt;</maxib 			GLOBAL	reject
>>>IB SG POS	0		9.2.1.33		_	
>>>Segment Type	C- CRNCOrig ination		9.2.1.53B		-	
>>>>IB SG DATA	C- CRNCOrig ination		9.2.1.32		-	
>>Deletion			NULL			

Range bound	Explanation			
maxIB	Maximum number of information Blocks supported in one message			
maxIBSEG	Maximum number of segments for one Information Block			

Condition	Explanation
CRNCOrigination	The IE shall be present if the SIB Originator IE is set to "CRNC" or if the
	IB Type IE is set to "MIB", "SB1" or "SB2".
SIB	The IE shall be present if the IB Type IE is set to "SIB".

### 9.1.34 SYSTEM INFORMATION UPDATE RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.35 SYSTEM INFORMATION UPDATE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Cause	М		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.36 RADIO LINK SETUP REQUEST

## 9.1.36.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	reject
UL DPCH Information		1			YES	reject
>UL Scrambling Code	M		9.2.2.59		_	
>Min UL Channelisation	M		9.2.2.22		_	
Code Length						
>Max Number of UL	C-		9.2.2.21		-	
DPDCHs	CodeLen					
>Puncture Limit	М		9.2.1.50	For UL	-	
>TFCS	М		9.2.1.58	For UL	-	
>UL DPCCH Slot Format	М		9.2.2.57		_	
>UL SIR Target	М		UL SIR		_	
7 0 2 cm ranget			9.2.1.67A			
>Diversity Mode	М		9.2.2.9		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>DPC Mode	0		9.2.2.13C		YES	reject
>UL DPDCH Indicator For E-DCH Operation	0		9.2.2.61	This IE may be present without the presence of the E-DPCH Information IE	YES	reject
DL DPCH Information		01			YES	reject
>TFCS	M		9.2.1.58	For DL	_	
>DL DPCH Slot Format	М		9.2.2.10		_	
>TFCI Signalling Mode	М		9.2.2.50		_	
>TFCI Presence	C- SlotFormat		9.2.1.57		_	
>Multiplexing Position	M		9.2.2.23		-	
>Not Used	0		NULL		_	
>Not Used	0		NULL		-	
>Power Offset		1			_	
Information						
>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	_	
>>PO2	М		Power Offset 9.2.2.29	Power offset for the TPC bits	_	
>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	_	
>FDD TPC DL Step Size	M		9.2.2.16		_	
>Limited Power Increase	M		9.2.2.18A		_	
>Inner Loop DL PC Status	M	ļ	9.2.2.18B		-	
DCH Information	M		DCH FDD Information 9.2.2.4D		YES	reject
RL Information		1 <maxno< td=""><td></td><td></td><td>EACH</td><td>notify</td></maxno<>			EACH	notify
		•				

	T	ofRLs>	1		1	1
>RL ID	М	OITLS2	9.2.1.53		_	
>C-ID	M		9.2.1.9		_	
>C-ID >First RLS Indicator	M		9.2.2.16A		_	
	M		9.2.1.31		_	
>Frame Offset	M		9.2.2.2		_	
>Chip Offset	0				_	
>Propagation Delay	C-		9.2.2.35		_	
>Diversity Control Field	NotFirstRL		9.2.1.25		_	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		_	
>Initial DL Transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH or on F-DPCH	_	
>Maximum DL Power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH or on F-DPCH	_	
>Minimum DL Power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH or on F-DPCH	_	
>Not Used	0		NULL		_	
>Transmit Diversity Indicator	C-Diversity mode		9.2.2.53		_	
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
	0		9.2.1.24C		YES	reject
>Delayed Activation	0		9.2.2.33A		YES	ignore
>Primary CPICH Usage For Channel Estimation			3.2.2.33A		120	ignore
>Secondary CPICH Information	0		Common Physical Channel ID 9.2.1.13		YES	ignore
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
>RL Specific E-DCH	0		9.2.2.39a		YES	ignore
Information						
>Synchronisation Indicator	0		9.2.2.48A		YES	ignore
>Extended Propagation Delay	0		9.2.2.35A		YES	ignore
>F-DPCH Slot Format	0		9.2.2.93		YES	reject
> HS-DSCH	0		9.2.2.112		YES	ignore
Preconfiguration Setup	<u> </u>		1001=			
>E-RNTI	0		9.2.1.75		YES	ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.125		YES	ignore
Transmission Gap Pattern	0		9.2.2.53A		YES	reject
Sequence Information Active Pattern Sequence	0		9.2.2.A		YES	reject
Information			0.0.0.400		VEC	ion on-
DL Power Balancing Information	0		9.2.2.12B		YES	ignore
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH-RNTI	C- InfoHSDS CH		9.2.1.31J		YES	reject
HS-PDSCH RL ID	C-		RL ID		YES	reject

	InfoHSDS CH		9.2.1.53			
E-DPCH Information		01			YES	reject
>Maximum Set of E- DPDCHs	М		9.2.2.20C		-	-
>Puncture Limit	М		9.2.1.50		_	
>E-TFCS Information	М		9.2.2.13Dh		_	
>E-TTI	М		9.2.2.13Di		_	
>E-DPCCH Power Offset	М		9.2.2.13Dj		_	
>E-RGCH 2-Index-Step Threshold	М		9.2.2.13lg		-	
>E-RGCH 3-Index-Step Threshold	М		9.2.2.13lh		-	
>HARQ Info for E-DCH	М		9.2.2.18ba		_	
>HS-DSCH Configured	М		9.2.2.18Ca		_	
Indicator						
>E-RNTI	0		9.2.1.75	Shall be ignored if <i>E-RNT</i> IE is included in the <i>RL Information</i> IE	YES	reject
>Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.114		YES	ignore
E-DCH FDD Information	C- EDPCHInf o		9.2.2.13Da		YES	reject
Serving E-DCH RL	0		9.2.2.48B		YES	reject
F-DPCH Information		01			YES	reject
>Power Offset		1			_	
Information						
>>PO2	М		Power Offset 9.2.2.29	This IE shall be ignored by Node B.	_	
>FDD TPC DL Step Size	M		9.2.2.16		_	
>Limited Power Increase	M		9.2.2.18A		_	
>Inner Loop DL PC Status	M		9.2.2.18B			
Initial DL DPCH Timing Adjustment Allowed	0		9.2.2.18K		YES	ignore
DCH Indicator For E-DCH- HSDPA Operation	0		9.2.2.4F		YES	reject
Serving Cell Change CFN	0		CFN 9.2.1.7		YES	reject
Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.66		YES	reject
Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.68		YES	reject
Additional HS Cell Information RL Setup		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.53			
>C-ID	M		9.2.1.9			
>HS-DSCH FDD Secondary	M		9.2.2.18Da		_	
Serving Information						

Condition	Explanation
CodeLen	The IE shall be present if Min UL Channelisation Code Length IE equals
	to 4.
NotFirstRL	The IE shall be present if the RL is not the first one in the RL Information
	IE.
SlotFormat	The IE shall be present if the DL DPCH Slot Format IE is equal to any of
	the values from 12 to 16.
Diversity mode	The IE shall be present if Diversity Mode IE in UL DPCH Information IE
	is not set to "none".
InfoHSDSCH	The IE shall be present if HS-DSCH Information IE is present.
EDPCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.

Range Bound	Explanation				
maxnoofRLs	Maximum number of RLs for one UE				
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE				

# 9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	reject
UL CCTrCH Information		0 <maxno CCTrCH&gt;</maxno 			EACH	notify
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	M		9.2.1.58		_	
>TFCI Coding	М		9.2.3.22		_	
>Puncture Limit	М		9.2.1.50		_	
>UL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A			
>>UL Timeslot Information	М		9.2.3.26C		_	
>UL DPCH Information LCR		01		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot Information LCR	М		9.2.3.26E		_	
>UL SIR Target	0		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>TDD TPC UL Step Size	0		9.2.3.21a	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>UL DPCH Information 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot Information 7.68Mcps	М		9.2.3.38		_	
DL CCTrCH Information		0 <maxno CCTrCH&gt;</maxno 			EACH	notify
>CCTrCH ID	M		9.2.3.3			
>TFCS	M		9.2.1.58		_	
>TFCI Coding	M		9.2.3.22			
>Puncture Limit	M		9.2.1.50			
>TDD TPC DL Step Size	M		9.2.3.21		_	
>TPC CCTrCH List		0 <maxno< td=""><td></td><td>List of uplink</td><td>_</td><td></td></maxno<>		List of uplink	_	

		CCTrCH>		CCTrCH which		
				provide TPC		
>>TPC CCTrCH ID	M		9.2.3.3		-	
>DL DPCH information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A			
>>DL Timeslot Information	M		9.2.3.4E		_	
>DL DPCH information LCR		01		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>DL Timeslot Information LCR	M		9.2.3.40		-	
>>TSTD Indicator	М		9.2.1.64		_	
>CCTrCH Initial DL	0		DL Power		YES	ignore
Transmission Power			9.2.1.21			
>CCTrCH Maximum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>CCTrCH Minimum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>DL DPCH information 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16	,	_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>DL Timeslot	M		9.2.3.39		_	
Information 7.68Mcps						
DCH Information	0		DCH TDD Information 9.2.3.4C		YES	reject
DSCH Information	0		DSCH TDD Information 9.2.3.5A		YES	reject
USCH Information	0		9.2.3.28		YES	reject
RL Information		1			YES	reject
>RL ID	M		9.2.1.53		_	
>C-ID	M		9.2.1.9		_	
>Frame Offset	M		9.2.1.31		_	
>Special Burst Scheduling	M		9.2.3.18A		_	
>Initial DL Transmission Power	M		DL Power 9.2.1.21		_ 	
>Maximum DL Power	M		DL Power 9.2.1.21		_	
>Minimum DL Power	M		DL Power 9.2.1.21		_	
>DL Time Slot ISCP Info	0		9.2.3.4F	Applicable to 3.84Mcps TDD and 7.68Mcps TDD only	_	
>DL Time Slot ISCP Info LCR	0		9.2.3.4P	Applicable to 1.28Mcps TDD only	YES	reject
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore

>Delayed Activation	0		9.2.1.24C		YES	reject
>UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>>Uplink Synchronisation Step Size	M		9.2.3.26H		-	
>>Uplink Synchronisation Frequency	М		9.2.3.26G		_	
>UARFCN	0		9.2.1.65	Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt [15]	YES	reject
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH-RNTI	C- InfoHSDS CH		9.2.1.31J		YES	reject
HS-PDSCH RL ID	C- InfoHSDS CH		RL ID 9.2.1.53		YES	reject
PDSCH-RL-ID	0		RL ID 9.2.1.53		YES	ignore
E-DCH Information		01		3.84Mcps TDD only	YES	reject
>E-PUCH Information	M		9.2.3.45		-	
>E-TFCS Information TDD	M		9.2.3.46		_	
>E-DCH MAC-d Flows Information TDD	М		9.2.3.47		_	
>E-DCH Non-scheduled Grant Information TDD	0		9.2.3.48		_	
>E-DCH TDD Information	M		9.2.3.49		_	
E-DCH Serving RL	0		9.2.1.53		YES	reject
E-DCH Information		01		7.68Mcps TDD only	YES	reject
7.68Mcps	N4		0.0.0.45	Only		
>E-PUCH Information >E-TFCS Information TDD	M		9.2.3.45 9.2.3.46			
>E-DCH MAC-d Flows	M		9.2.3.47			
Information TDD  >E-DCH Non-scheduled Grant Information 7.68Mcps TDD	0		9.2.3.64		_	
>E-DCH TDD Information 7.68Mcps	М		9.2.3.65		_	
E-DCH Information 1.28Mcps		01		1.28Mcps TDD only	YES	reject
>E-PUCH Information LCR	M		9.2.3.45a		-	
>E-TFCS Information TDD	M		9.2.3.46		_	
>E-DCH MAC-d Flows Information TDD	M		9.2.3.47		_	
>E-DCH Non-scheduled Grant Information LCR TDD	0		9.2.3.48a		-	
>E-DCH TDD Information LCR	М		9.2.3.49a		_	
Power Control GAP	0		INTEGER (1255)	Unit: Number of subframes Applicable to 1.28Mcps TDD only	YES	ignore

Continuous Packet Connectivity DRX Information LCR	0	9.2.3.93	1.28 Mcps TDD only	YES	reject
HS-DSCH Semi-Persistent scheduling Information LCR	0	9.2.3.96	1.28 Mcps TDD only	YES	reject
E-DCH Semi-Persistent scheduling Information LCR	0	9.2.3.97	1.28 Mcps TDD only	YES	reject
Idle Interval Information	0	9.2.3.102	TDD only	YES	ignore
UE Selected MBMS Service Information	0	9.2.3.104	This IE indicates the Time Slot information and/or TDM information of UE selected MBMS service in the other frequency. For 1.28Mcps TDD only.	YES	ignore
HS-SCCH TPC step size	0	9.2.3.21	1.28 Mcps TDD only. This IE is mandatory if "DL CCTrCH Information" IE and " E-DCH Information 1.28 Mcps" IE are both absent	YES	ignore
HS-DSCH-RNTI for FACH	0	HS-DSCH- RNTI 9.2.1.31J	1.28 Mcps TDD only	YES	ignore

Range Bound	Explanation			
maxnoCCTrCH	Number of CCTrCHs for one UE			

Condition	Explanation			
InfoHSDSCH	The IE shall be present if HS-DSCH Information IE is present.			

## 9.1.37 RADIO LINK SETUP RESPONSE

## 9.1.37.1 FDD message

		Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53			
>RL Set ID	М		9.2.2.39		_	
>Received Total Wide Band Power	М		9.2.2.39A		-	
>CHOICE Diversity Indication	М				-	
>>Combining						
>>>RL ID	М		9.2.1.53	Reference RL ID for the combining	-	
>>Non Combining or First RL				-		
>>>DCH Information Response	М		9.2.1.20C		_	
>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>Not Used	0		NULL		_	
>SSDT Support Indicator	M		9.2.2.46		_	
>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.10A		YES	ignore
> HS-DSCH	0		9.2.2.111		YES	ignore
Preconfiguration Info >Non-Serving RL	0		9.2.2.126		YES	ignore
Preconfiguration Info	0		0 2 4 4 7		VEC	ienora
Criticality Diagnostics			9.2.1.17		YES	ignore
HS-DSCH Information Response	0		HS-DSCH FDD Information Response 9.2.2.18E		YES	ignore
Continuous Packet	0		9.2.2.69		YES	ignore

Connectivity HS-SCCH less Information Response						
Additional HS Cell Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	M		RL ID 9.2.1.53		_	
>HS-DSCH FDD Secondary Serving Information Response	М		9.2.2.18EA		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.37.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		01		Mandatory for 3.84Mcps TDD and 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.53	•	-	
>UL Time Slot ISCP Info	М		9.2.3.26D		-	
>UL PhysCH SF Variation	М		9.2.3.26B		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DSCH Information Response	0		9.2.3.5b		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
RL Information Response LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.53		_	
>UL Time Slot ISCP Info LCR	M		9.2.3.26F		_	
>UL PhysCH SF Variation	М		9.2.3.26B		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DSCH Information Response	0		9.2.3.5b		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore
HS-DSCH Information Response	0		HS-DSCH TDD Information Response 9.2.3.5G		YES	ignore
E-DCH Information Response	0		E-DCH TDD Information Response 9.2.3.50		YES	ignore
Continuous Packet Connectivity DRX Information Response LCR	0		9.2.3.95	1.28 Mcps TDD only	YES	ignore

HS-DSCH Semi-Persistent	0	9	9.2.3.98	1.28 Mcps TDD	YES	ignore
scheduling Information				only		
Response LCR						
E-DCH Semi-Persistent	0	9	9.2.3.99	1.28 Mcps TDD	YES	ignore
scheduling Information				only		
Response LCR						
E-RNTI for FACH	0	E	E-RNTI	1.28 Mcps TDD	YES	ignore
		9	9.2.1.75	only		

## 9.1.38 RADIO LINK SETUP FAILURE

## 9.1.38.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	C-Success		9.2.1.48	The reserved value "All NBCC' shall not be used	YES	ignore
Communication Control Port ID	0		9.2.1.15		YES	ignore
CHOICE Cause Level	M				YES	ignore
>General						
>>Cause	M		9.2.1.6		_	
>RL Specific						
>>Unsuccessful RL Information Response		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>Cause	M		9.2.1.6		_	
>>Successful RL Information Response		0 <maxno ofRLs&gt;</maxno 		Note: There will never be maxnoofRLs repetitions of this sequence.	EACH	ignore
>>>RL ID	M		9.2.1.53		_	
>>>RL Set ID	M		9.2.2.39		_	
>>>Received Total Wide Band Power	М		9.2.2.39A		_	
>>>CHOICE Diversity Indication	М				_	
>>>Combining						
>>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	_	
>>>Non Combining or First RL						
>>>>DCH Information Response	М		9.2.1.20C		_	
>>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>>>Not Used	0		NULL		_	
>>>Not Used	0		NULL		_	
>>>SSDT Support Indicator	M		9.2.2.46			
>>>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>>>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>>>E-DCH FDD DL	0		9.2.2.13Dc		YES	ignore

Control Channel Information						
>>>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.10A		YES	ignore
>>> HS-DSCH Preconfiguration Info	0		9.2.2.111		YES	ignore
>>>Non-Serving RL Preconfiguration Info	0		9.2.2.126		YES	ignore
>>HS-DSCH Information Response	0		HS-DSCH FDD Information Response 9.2.2.18E		YES	ignore
>>Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.69		YES	ignore
>>Additional HS Cell Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>>>HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
>>>HS-DSCH FDD Secondary Serving Information Response	М		9.2.2.18EA		-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Condition	Explanation
Success	The IE shall be present if at least one of the radio links has been
	successfully set up.

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.38.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
CHOICE Cause Level	M				YES	ignore
>General						
>>Cause	М		9.2.1.6		_	
>RL Specific						
>>Unsuccessful RL Information Response		1			YES	ignore
>>>RL ID	M		9.2.1.53		_	
>>>Cause	M		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.39 RADIO LINK ADDITION REQUEST

## 9.1.39.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	,
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
Compressed Mode Deactivation Flag	0		9.2.2.3A		YES	reject
RL Information		1 <maxno ofRLs-1&gt;</maxno 			EACH	notify
>RL ID	M		9.2.1.53		_	
>C-ID	М		9.2.1.9		-	
>Frame Offset	M		9.2.1.31		-	
>Chip Offset	М		9.2.2.2		_	
>Diversity Control Field	М		9.2.1.25		-	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		_	
>Initial DL Transmission Power	0		DL Power 9.2.1.21	Initial power on DPCH or on F-DPCH	-	
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH or on F-DPCH	_	
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH or on F-DPCH	_	
>Not Used	0		NULL		_	
>Transmit Diversity Indicator	0		9.2.2.53		_	
>DL Reference Power	0		DL power 9.2.1.21	Power on DPCH or on F-DPCH	YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>Delayed Activation	0		9.2.1.24C		YES	reject
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
>RL Specific E-DCH Information	0		9.2.2.39a		YES	ignore
>Synchronisation Indicator	0		9.2.2.48A		YES	ignore
>F-DPCH Slot Format	0		9.2.2.93		YES	reject
>HS-DSCH	0		9.2.2.112		YES	ignore
Preconfiguration Setup >Non-Serving RL	0		9.2.2.125		YES	Ignore
Preconfiguration Setup Initial DL DPCH Timing	0		9.2.2.18K		YES	ignore
Adjustment Allowed	<u> </u>				,	
Serving E-DCH RL Serving Cell Change CFN	0		9.2.2.48B CFN		YES YES	reject reject
LIC DCCLI Comittee Coll			9.2.1.7		VEC	na!
HS-DSCH Serving Cell	0		9.2.2.18Eb		YES	reject

Change Information						
E-DPCH Information		01			YES	reject
>Maximum Set of E- DPDCHs	М		9.2.2.20C		_	
>Puncture Limit	М		9.2.1.50		_	
>E-TFCS Information	M		9.2.2.13Dh		_	
>E-TTI	M		9.2.2.13Di			
>E-DPCCH Power Offset	М		9.2.2.13Dj		_	
>E-RGCH 2-Index-Step Threshold	M		9.2.2.13lg		-	
>E-RGCH 3-Index-Step Threshold	М		9.2.2.13lh		-	
>HARQ Info for E-DCH	М		9.2.2.18ba		_	
>HS-DSCH Configured Indicator	М		9.2.2.18Ca		YES	reject
> Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.114		YES	ignore
E-DCH FDD Information	C- EDPCHInf o		9.2.2.13Da		YES	reject
Additional HS Cell Information RL Addition		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
>C-ID	М		9.2.1.9		_	
>HS-DSCH FDD Secondary Serving Information	М		9.2.2.18Da		-	

Condition	Explanation
EDPCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.39.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL CCTrCH Information		0 <maxno CCTrCH&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		_	
>UL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot Information	М		9.2.3.26C			
>UL DPCH Information LCR		01		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>UL Timeslot Information LCR	М		9.2.3.26E		_	
>TDD TPC UL Step Size	0		9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	reject
>UL DPCH Information 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot Information 7.68Mcps	М		9.2.3.38		_	
DL CCTrCH Information		0 <maxno CCTrCH&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		_	
>DL DPCH information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>DL Timeslot Information	М		9.2.3.4E		_	
>DL DPCH information LCR		01		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16	•	-	
>>Repetition Length	М		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>DL Timeslot Information LCR	М		9.2.3.40		_	
>CCTrCH Initial DL	0		DL Power		YES	ignore

Transmission Power			9.2.1.21			
>TDD TPC DL Step Size	0		9.2.3.21		YES	reject
>CCTrCH Maximum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>CCTrCH Minimum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>DL DPCH information 7.68Mcps		01	0.2.1.21	Applicable to 7.68Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16	Orny	_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>DL Timeslot Information 7.68Mcps	М		9.2.3.39		-	
RL Information		1			YES	reject
>RL ID	М		9.2.1.53		_	
>C-ID	М		9.2.1.9		_	
>Frame Offset	M		9.2.1.31		ı	
>Diversity Control Field	M		9.2.1.25		ı	
>Initial DL Transmission Power	0		DL Power 9.2.1.21		1	
>Maximum DL Power	0		DL Power 9.2.1.21		_	
>Minimum DL Power	0		DL Power 9.2.1.21		-	
>DL Time Slot ISCP Info	0		9.2.3.4F	Applicable to 3.84Mcps TDD and 7.68Mcps TDD only	I	
>DL Time Slot ISCP Info LCR	0		9.2.3.4P	Applicable to 1.28Mcps TDD only	YES	reject
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>Delayed Activation	0		9.2.1.24C		YES	reject
>UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>>Uplink Synchronisation Step Size	М		9.2.3.26H		_	
>>Uplink Synchronisation Frequency	М		9.2.3.26G		_	
>UARFCN	0		9.2.1.65	Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt [15]	YES	reject
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.53		YES	reject
E-DCH Information		01	5.2.1.00	3.84Mcps TDD only	YES	reject
>E-PUCH Information	М		9.2.3.45		_	

>E-TFCS Information TDD         M         9.2.3.46         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         —           >E-DCH Non-scheduled Grant Information TDD         O         9.2.3.48         —           >E-DCH TDD Information M         9.2.3.49         —           E-DCH Serving RL         O         9.2.1.53         YES           E-DCH Information 7.68Mcps         O         9.2.3.45         —           >E-PUCH Information M         9.2.3.45         —         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.46         —         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         — </th <th>reject reject</th>	reject reject
Information TDD	reject
SE-DCH Non-scheduled Grant Information TDD	reject
Grant Information TDD   SE-DCH TDD Information   M   9.2.3.49   —	reject
>E-DCH TDD Information         M         9.2.3.49         -           E-DCH Serving RL         O         9.2.1.53         YES           E-DCH Information         01         7.68Mcps TDD only         YES           >E-PUCH Information         M         9.2.3.45         -           >E-PUCH Information TDD         M         9.2.3.46         -           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         -           SE-DCH Non-scheduled Grant Information 7.68Mcps TDD         O         9.2.3.64         -           SE-DCH TDD Information 7.68Mcps TDD         9.2.3.65         -         -           SE-DCH Information 1.28Mcps         O         1.28Mcps TDD         YES           B-DCH Information CR         M         9.2.3.45a         -           SE-PUCH Information TDD         M         9.2.3.45a         -           SE-DCH MAC-d Flows Information TDD         M         9.2.3.47         -	reject
E-DCH Serving RL         O         9.2.1.53         YES           E-DCH Information 7.68Mcps         01         7.68Mcps TDD only         YES           >E-PUCH Information M         9.2.3.45         -         -           >E-TFCS Information TDD M         9.2.3.46         -         -           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         -         -           Information TDD         O         9.2.3.64         -         -           SE-DCH Non-scheduled Grant Information 7.68Mcps TDD         O         9.2.3.65         -         -           SE-DCH TDD Information 7.68Mcps         O         9.2.3.65         -         -           SE-DCH Information 1.28Mcps         O         1.28Mcps         O         O         9.2.3.45         -         -           SE-PUCH Information LCR Selector Information TDD M         9.2.3.45a         -	reject
E-DCH Information         01         7.68Mcps TDD only         YES           >E-PUCH Information         M         9.2.3.45         —           >E-TFCS Information TDD         M         9.2.3.46         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         —           >E-DCH Non-scheduled Grant Information 7.68Mcps TDD         O         9.2.3.64         —           >E-DCH TDD Information 7.68Mcps TDD         M         9.2.3.65         —           E-DCH Information 1.28Mcps         O1         1.28Mcps TDD Only         YES           E-DCH Information LCR M         9.2.3.45a         —           >E-TFCS Information TDD M         9.2.3.46         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         —	reject
7.68Mcps	
>E-PUCH Information         M         9.2.3.45         —           >E-TFCS Information TDD         M         9.2.3.46         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         —           Information TDD         P.2.3.64         —         —           SE-DCH Non-scheduled Grant Information 7.68Mcps         O         9.2.3.64         —         —           SE-DCH TDD Information 7.68Mcps         M         9.2.3.65         —         —         —           SE-DCH Information 1.28Mcps         O1         1.28Mcps TDD only         YES only         — <t< td=""><td></td></t<>	
>E-TFCS Information TDD         M         9.2.3.46         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         —             SE-DCH Non-scheduled Grant Information 7.68Mcps         O         9.2.3.64         —             SE-DCH TDD Information 7.68Mcps         M         9.2.3.65         —             SE-DCH Information 1.28Mcps         O1         1.28Mcps TDD only         YES             SE-PUCH Information LCR M         9.2.3.45a         —             SE-TFCS Information TDD M         9.2.3.46         —             SE-DCH MAC-d Flows Information TDD         M         9.2.3.47         —	
>E-DCH MAC-d Flows Information TDD         M         9.2.3.47         —           >E-DCH Non-scheduled Grant Information 7.68Mcps TDD         O         9.2.3.64         —           >E-DCH TDD Information 7.68Mcps         M         9.2.3.65         —           E-DCH Information 1.28Mcps         O 1         1.28Mcps TDD only         YES           >E-PUCH Information LCR M         9.2.3.45a         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.46         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         —	
Information TDD	
>E-DCH Non-scheduled Grant Information 7.68Mcps TDD         O         9.2.3.64         —           >E-DCH TDD Information 7.68Mcps         M         9.2.3.65         —           E-DCH Information 1.28Mcps         01         1.28Mcps TDD only         YES           >E-PUCH Information LCR >E-TFCS Information TDD         M         9.2.3.45a         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         —	
Grant Information 7.68Mcps         9.2.3.65           TDD         -           >E-DCH TDD Information 7.68Mcps         9.2.3.65           E-DCH Information 1.28Mcps         01           1.28Mcps TDD only         YES only           >E-PUCH Information LCR M         9.2.3.45a           >E-TFCS Information TDD M         9.2.3.46           >E-DCH MAC-d Flows Information TDD         M           Information TDD         9.2.3.47	
TDD	
>E-DCH TDD Information         M         9.2.3.65         —           7.68Mcps         01         1.28Mcps TDD only         YES           1.28Mcps         01         9.2.3.45a         —           >E-PUCH Information LCR         M         9.2.3.45a         —           >E-TFCS Information TDD         M         9.2.3.46         —           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         —	
7.68Mcps         01         1.28Mcps TDD only         YES only           1.28Mcps         9.2.3.45a         -           >E-PUCH Information LCR         M         9.2.3.45a         -           >E-TFCS Information TDD         M         9.2.3.46         -           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         -	
E-DCH Information         01         1.28Mcps TDD only         YES           1.28Mcps         01         9.2.3.45a         -           >E-PUCH Information LCR         M         9.2.3.45a         -           >E-TFCS Information TDD         M         9.2.3.46         -           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         -	
1.28Mcps         only           >E-PUCH Information LCR         M         9.2.3.45a         -           >E-TFCS Information TDD         M         9.2.3.46         -           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         -	
1.28Mcps         only           >E-PUCH Information LCR         M         9.2.3.45a         -           >E-TFCS Information TDD         M         9.2.3.46         -           >E-DCH MAC-d Flows Information TDD         M         9.2.3.47         -	reject
>E-PUCH Information LCR         M         9.2.3.45a         -           >E-TFCS Information TDD         M         9.2.3.46         -           >E-DCH MAC-d Flows         M         9.2.3.47         -           Information TDD         P         9.2.3.47         -	-
>E-TFCS Information TDD M 9.2.3.46 — >E-DCH MAC-d Flows M 9.2.3.47 — Information TDD	
>E-DCH MAC-d Flows M 9.2.3.47 – Information TDD	
Information TDD	
Grant Information LCR TDD	
>E-DCH TDD Information M 9.2.3.49a –	
LCR	
Power Control GAP O INTEGER Unit: Number of YES	ignore
(1255) subframes	1911010
Applicable to	
1.28Mcps TDD	
only	
Continuous Packet O 9.2.3.93 1.28 Mcps TDD YES	reject
Connectivity DRX Information only	10,000
LCR	
HS-DSCH Semi-Persistent O 9.2.3.96 1.28 Mcps TDD YES	reject
scheduling Information LCR only	roject
E-DCH Semi-Persistent O 9.2.3.97 1.28 Mcps TDD YES	reject
scheduling Information LCR	TOJOOL
Idle Interval Information O 9.2.3.102 TDD only YES	ignore
UE Selected MBMS Service O 9.2.3.104 This IE YES	
Information 9.2.3.104 This IE YES Indicates the	ignore
Information Indicates the Time Slot	
information	
and/or TDM	
information of	
UE selected	
MBMS service	
in the other	
frequency. For	
1.28Mcps TDD	
only.	
HS-SCCH TPC step size O 9.2.3.21 1.28 Mcps TDD YES	ignore
only.	
This IE is	
mandatory if	
"DL CCTrCH	
Information" IE	
and " E-DCH	
Information	

Range Bound	Explanation
maxnoCCTrCH	Number of CCTrCH for one UE

Condition	Explanation
HSDSCHRadioLink	The IE shall be present if HS-PDSCH RL ID IE is present

## 9.1.40 RADIO LINK ADDITION RESPONSE

## 9.1.40.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
RL Information Response		1 <maxno ofRLs-1&gt;</maxno 			EACH	ignore
>RL ID	M		9.2.1.53		ı	
>RL Set ID	М		9.2.2.39		1	
>Received Total Wide Band Power	M		9.2.2.39A		_	
>CHOICE Diversity Indication	M				_	
>>Combining						
>>>RL ID	М		9.2.1.53	Reference RL	_	
>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>>Non Combining	M		9.2.1.20C			
>>>DCH Information Response					_	
>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>SSDT Support Indicator	М		9.2.2.46		_	
>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.10A		YES	ignore
> HS-DSCH Preconfiguration Info	0		9.2.2.111		YES	ignore
>Non-Serving RL Preconfiguration Info	0		9.2.2.126		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
HS-DSCH Serving Cell Change Information Response	0		9.2.2.18Ec		YES	ignore
E-DCH Serving Cell Change Information Response	0		9.2.2.18Ed		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.38Ac		YES	ignore
Additional HS Cell Change Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	M		RL ID 9.2.1.53		_	

>HS-DSCH Secondary	M	9.2.2.18Eca	-	
Serving Cell Change				
Information Response				

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.40.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
RL Information Response		01		Mandatory for 3.84Mcps TDD and 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.53		_	
>UL Time Slot ISCP Info	M		9.2.3.26D		_	
>UL PhysCH SF Variation	M		9.2.3.26B		_	
>DCH Information		01			_	
>>CHOICE Diversity Indication	М				_	
>>>Combining				Indicates whether the old Transport Bearer shall be reused or not		
>>>>RL ID	M		9.2.1.53	Reference RL	-	
>>>Non Combining						
>>>>DCH Information Response	М		9.2.1.20C		_	
>DSCH Information Response	0		9.2.3.5b		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
RL Information Response LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.53	·	_	
>UL Time Slot ISCP Info LCR	М		9.2.3.26F		_	
>UL PhysCH SF Variation	М		9.2.3.26B		_	
>DCH Information		01			_	
>>CHOICE Diversity indication	М				_	
>>>Combining				Indicates whether the old Transport Bearer shall be reused or not		
>>>RL ID	M		9.2.1.53	Reference RL	_	
>>>Non Combining						
>>>>DCH Information Response	М		9.2.1.20C		_	
>DSCH Information Response	0		9.2.3.5b		YES	ignore

>USCH Information Response	0	9.2.3.29		YES	ignore
HS-DSCH Information Response	0	HS-DSCH TDD Information Response 9.2.3.5G		YES	ignore
E-DCH Information Response	0	E-DCH TDD Information Response 9.2.3.50		YES	ignore
Continuous Packet Connectivity DRX Information Response LCR	0	9.2.3.95	1.28 Mcps TDD only	YES	ignore
HS-DSCH Semi-Persistent scheduling Information Response LCR	0	9.2.3.98	1.28 Mcps TDD only	YES	ignore
E-DCH Semi-Persistent scheduling Information Response LCR	0	9.2.3.99	1.28 Mcps TDD only	YES	ignore

## 9.1.41 RADIO LINK ADDITION FAILURE

## 9.1.41.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		-	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
CHOICE Cause Level	М				YES	ignore
>General						
>>Cause	М		9.2.1.6		_	
>RL Specific						
>>Unsuccessful RL Information Response		1 <maxno ofRLs-1&gt;</maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
>>Successful RL Information Response		0 <maxno ofRLs-2&gt;</maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>RL ID	M		9.2.2.39		_	
>>>Received Total	M		9.2.2.39A		_	
Wide Band Power			0.2.2.007			
>>>CHOICE Diversity	М				_	
Indication						
>>>Combining						
>>>>RL ID	М		9.2.1.53	Reference RL	_	
>>>>E-DCH FDD	0		9.2.2.13Db		YES	ignore
Information Response			0.2.2.1000		120	ignore
>>>Non Combining						
>>>>DCH Information Response	М		9.2.1.20C		_	
>>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>>>SSDT Support Indicator	М		9.2.2.46		_	
>>>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>>>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>>>E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc		YES	ignore
>>>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.10A		YES	ignore
>>> HS-DSCH Preconfiguration Info	0		9.2.2.111		YES	ignore
>>>Non-Serving RL Preconfiguration Info	0		9.2.2.126		YES	ignore

Criticality Diagnostics	0		9.2.1.17		YES	ignore
HS-DSCH Serving Cell	0		9.2.2.18Ec		YES	ignore
Change Information						
Response						
E-DCH Serving Cell Change	0		9.2.2.18Ed		YES	ignore
Information Response						
Additional HS Cell Change		0 <maxno< td=""><td></td><td>For secondary</td><td>EACH</td><td>ignore</td></maxno<>		For secondary	EACH	ignore
Information Response		ofHSDSC H-1>		serving HS- DSCH cell. Max 1 in this 3GPP release.		
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
>HS-DSCH Secondary Serving Cell Change Information Response	М		9.2.2.18Eca		_	
MAC-hs Reset Indicator	0		9.2.1.38Ac		YES	ignore

Range Bound Explanation			
maxnoofRLs	Maximum number of RLs for one UE		
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE		

## 9.1.41.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
CHOICE Cause Level	M				YES	ignore
>General						
>>Cause	M		9.2.1.6		_	
>RL Specific						
>>Unsuccessful RL Information Response		1			YES	ignore
>>>RL ID	M		9.2.1.53		_	
>>>Cause	M		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.42 RADIO LINK RECONFIGURATION PREPARE

## 9.1.42.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL DPCH Information		01			YES	reject
>UL Scrambling Code	0		9.2.2.59		_	
>UL SIR Target	0		UL SIR 9.2.1.67A		_	
>Min UL Channelistion Code Length	0		9.2.2.22		_	
>Max Number of UL DPDCHs	C- CodeLen		9.2.2.21		_	
>Puncture Limit	0		9.2.1.50	For UL	-	
>TFCS	0		9.2.1.58		-	
>UL DPCCH Slot Format	0		9.2.2.57		_	
>Diversity Mode	0		9.2.2.9		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>UL DPDCH Indicator For	0		9.2.2.61		YES	reject
E-DCH Operation						,
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58		_	,
>DL DPCH Slot Format	0		9.2.2.10		_	
>TFCI Signalling Mode	0		9.2.2.50		_	
>TFCI Presence	C- SlotFormat		9.2.1.57		_	
>Multiplexing Position	0		9.2.2.23		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>Limited Power Increase	0		9.2.2.18A		_	
>DL DPCH Power Information		01			YES	reject
>>Power Offset Information		1			-	
>>>PO1	М		Power Offset 9.2.2.29	Power offset for the TFCI bits	_	
>>>PO2	М		Power Offset 9.2.2.29	Power offset for the TPC bits	_	
>>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	_	
>>FDD TPC DL Step Size	M		9.2.2.16		_	
>>Inner Loop DL PC Status	M		9.2.2.18B		_	
DCHs To Modify	0		DCHs FDD To Modify 9.2.2.4E		YES	reject
DCHs To Add	0		DCH FDD Information		YES	reject

			9.2.2.4D			
DCHs To Delete		0 <maxno ofDCHs&gt;</maxno 			GLOBAL	reject
>DCH ID	М		9.2.1.20		_	
RL Information		0 <maxno ofRLs&gt;</maxno 			EACH	reject
>RL ID	М		9.2.1.53		_	
>DL Code Information	0		FDD DL Code Information 9.2.2.14A		-	
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH or on F-DPCH	-	
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH or on F-DPCH	-	
>Not Used	0		NULL		_	
>Not Used	0		NULL		-	
>Transmit Diversity Indicator	C-Diversity mode		9.2.2.53		_	
>DL Reference Power	0		DL Power 9.2.1.21	Power on DPCH or on F-DPCH	YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>DL DPCH Timing Adjustment	0		9.2.2.10A	Required RL Timing Adjustment	YES	reject
>Primary CPICH Usage For Channel Estimation	0		9.2.2.33A	,	YES	ignore
>Secondary CPICH Information Change	0		9.2.2.43A		YES	ignore
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
>RL Specific E-DCH Information	0		9.2.2.39a		YES	ignore
>F-DPCH Slot Format	0		9.2.2.93		YES	reject
>HS-DSCH Preconfiguration Setup	0		9.2.2.112		YES	ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.125		YES	ignore
>Non-Serving RL Preconfiguration Removal	0		Non- Serving RL Preconfigur ation Setup 9.2.2.125		YES	ignore
Transmission Gap Pattern Sequence Information	0		9.2.2.53A		YES	reject
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	reject
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH Information To Modify	0		9.2.1.31H		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information		YES	reject

			9.2.1.31IA			
HS-DSCH MAC-d Flows To Delete	0		9.2.1.31IB		YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.53		YES	reject
E-DPCH Information		01	0.200		YES	reject
>Maximum Set of E-	0		9.2.2.20C			
DPDCHs						
>Puncture Limit	0		9.2.1.50		_	
>E-TFCS Information >E-TTI	0		9.2.2.13Dh 9.2.2.13Di			
>E-DPCCH Power Offset	0		9.2.2.13Dj			
>E-RGCH 2-Index-Step	0		9.2.2.13lg		_	
Threshold			9.2.2.13lh			
>E-RGCH 3-Index-Step Threshold	0				_	
>HARQ Info for E-DCH	0		9.2.2.18ba		_	
>HS-DSCH Configured Indicator	0		9.2.2.18Ca		_	
> Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.114		YES	ignore
E-DCH FDD Information	0		E-DCH FDD Information 9.2.2.13Da		YES	reject
E-DCH FDD Information To Modify	0		9.2.2.13Df		YES	reject
E-DCH MAC-d Flows To Add	0		E-DCH MAC-d Flows Information 9.2.2.13M		YES	reject
E-DCH MAC-d Flows To	0		9.2.1.73		YES	reject
Delete	0		9.2.2.48B		YES	reject
Serving E-DCH RL	-	01	9.2.2.400		YES	reject
F-DPCH Information		1			-	reject
>Power Offset Information		,				
>>PO2	М		Power Offset 9.2.2.29	This IE shall be ignored by Node B.	_	
>FDD TPC DL Step Size	M		9.2.2.16		_	
>Limited Power Increase	M		9.2.2.18A		_	
>Inner Loop DL PC Status	M		9.2.2.18B		_	
Fast Reconfiguration Mode	0		9.2.2.62		YES	ignore
CPC Information		01			YES	reject
>Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.66		_	
>Continuous Packet Connectivity DTX-DRX Information To Modify	0		9.2.2.67		-	
>Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.68		_	
>Continuous Packet Connectivity HS-SCCH	0		9.2.2.69A		YES	reject

less Deactivate Indicator						
Additional HS Cell Information RL Reconf Prep		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
>C-ID	0		9.2.1.9		_	
>HS-DSCH FDD Secondary Serving Information	0		9.2.2.18Da		_	
>HS-DSCH FDD Secondary Serving Information To Modify	0		9.2.2.18EB		_	
>HS-DSCH Secondary Serving Remove	0		NULL		_	

Condition	Explanation
CodeLen	The IE shall be present if the Min UL Channelisation Code Length IE is
	equals to 4.
SlotFormat	The IE shall be present if the DL DPCH Slot Format IE is equal to any of
	the values from 12 to 16.
Diversity mode	The IE shall be present if the <i>Diversity Mode</i> IE is present in the <i>UL</i>
	DPCH Information IEand is not set to "none".
HSDSCH Radio Link	The IE shall be present if HS-PDSCH RL ID IE is present.

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofRLs	Maximum number of RLs for a UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.42.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL CCTrCH To Add		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	M		9.2.1.58		_	
>TFCI Coding	М		9.2.3.22		_	
>Puncture Limit	М		9.2.1.50		_	
>UL DPCH To Add Per RL		0 <maxno ofRLs&gt;</maxno 		See note 1 below	_	
>>UL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	M		9.2.3.19A		_	
>>>UL Timeslot	M		9.2.3.26C		_	
Information						
>>UL DPCH Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16	,	_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>UL Timeslot Information LCR	М		9.2.3.26E		_	
>>UL SIR Target	0		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD	YES	reject
>>TDD TPC UL Step Size	0		9.2.3.21a	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>>RL ID	0		9.2.1.53	•	YES	ignore
>>UL DPCH Information 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	reject
>>>Repetition Period	M		9.2.3.16	,,	_	
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	M		9.2.3.19A		_	
>>>UL Timeslot	M		9.2.3.38		_	
Information 7.68Mcps						
UL CCTrCH To Modify		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
	1	1	1	1	1	1

TEOO	0	1	9.2.1.58	T	_	
>TFCS	0		9.2.1.30		_	
>TFCI Coding	0		9.2.3.22		_	
>Puncture Limit	0	0 (mayna	9.2.1.50	Coo noto 1	_	
>UL DPCH To Modify Per RL		0 <maxno ofRLs&gt;</maxno 		See note 1 below	_	
>>UL DPCH To Add		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	M		9.2.3.16		_	
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	M		9.2.3.19A		_	
>>>UL Timeslot	M		9.2.3.26C		_	
Information						
>>UL DPCH To Modify		01			YES	reject
>>>Repetition Period	0		9.2.3.16		_	
>>>Repetition Length	0		9.2.3.15		_	
>>>TDD DPCH Offset	0		9.2.3.19A		_	
>>>UL Timeslot Information		0 <maxno ofULts&gt;</maxno 		Applicable to 3.84Mcps TDD only	_	
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble Shift	0		9.2.3.7		_	
And Burst Type						
>>>TFCI Presence	0		9.2.1.57		_	
>>>UL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofDPCHs>				
>>>>DPCH ID	M		9.2.3.5		_	
>>>>TDD	0		9.2.3.19		_	
Channelisation Code						
>>>UL Timeslot		0 <maxno< td=""><td></td><td>Applicable to</td><td>GLOBAL</td><td>reject</td></maxno<>		Applicable to	GLOBAL	reject
Information LCR		ofULtsLCR >		1.28Mcps TDD only		
>>>>Time Slot LCR	M		9.2.3.24A		_	
>>>>Midamble Shift LCR	0		9.2.3.7A			
>>>TFCI Presence	0		9.2.1.57		_	
>>>>UL Code Information LCR		0 <maxno ofDPCHsL CR&gt;</maxno 			_	
>>>>DPCH ID	М		9.2.3.5		_	
>>>>TDD Channelisation Code LCR	0		9.2.3.19a		-	
>>>>TDD UL DPCH Time Slot Format LCR	0		9.2.3.21C		YES	reject
>>>PLCCH Information	0		9.2.3.31		YES	reject
>>>UL Timeslot Information 7.68Mcps		0 <maxno ofULts&gt;</maxno 		Applicable to 7.68Mcps TDD only	GLOBAL	reject
>>>>Time Slot	M		9.2.3.23			
>>>>Midamble Shift	0		9.2.3.35			
And Burst Type 7.68Mcps						
>>>TFCI Presence	0		9.2.1.57		_	
>>>>UL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofDPCHs>				
IIIIOIIIIalioii						
7.68Mcps			9.2.3.5			

		1	00004			
>>>>TDD	0		9.2.3.34		_	
Channelisation Code						
7.68Mcps		0			CLODAL	:t
>>UL DPCH To Delete		0 <maxno ofDPCHs&gt;</maxno 			GLOBAL	reject
>>>DPCH ID	М	0.2. 00	9.2.3.5		_	
>>UL DPCH To Add LCR		01		Applicable to	YES	reject
77 02 27 077 773 2077				1.28Mcps TDD only		·
>>>Repetition Period	M		9.2.3.16		_	
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	M		9.2.3.19A		_	
>>>UL Timeslot	M		9.2.3.26E		_	
Information LCR						
>>UL SIR Target	0		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	reject
>>TDD TPC UL Step Size	0		9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	reject
>>RL ID	0		9.2.1.53	•	YES	ignore
>>UL DPCH To Add 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>UL Timeslot	М		9.2.3.38		_	
Information 7.68Mcps						
UL CCTrCH To Delete		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
DL CCTrCH To Add		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	М		9.2.1.58		_	
>TFCI Coding	M		9.2.3.22		_	
>Puncture Limit	M		9.2.1.50		_	
>TPC CCTrCH List		0 <maxno ofCCTrCH s&gt;</maxno 		List of uplink CCTrCH which provide TPC	-	
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.3	, pre-11-2	_	
>DL DPCH To Add Per RL		0 <maxno ofRLs&gt;</maxno 		See Note 1 below	_	
>>DL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	M	1	9.2.3.15		_	
>>>TDD DPCH Offset	M	1	9.2.3.19A		_	
>>>DL Timeslot	M	1	9.2.3.4E		_	
Information						
>>DL DPCH Information		01		Applicable to	YES	reject
LCR				1.28Mcps TDD only		•
>>>Repetition Period	M		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot	M		9.2.3.40		<u> </u>	

Information LCR				
>>CCTrCH Initial DL	0	DL Power	YES	ignore
Transmission Power		9.2.1.21		
>>TDD TPC DL Step Size	0	9.2.3.21	YES	reject

		Г	T			
>>CCTrCH Maximum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>>CCTrCH Minimum DL	0		DL Power		YES	ignore
Transmission Power			9.2.1.21		120	ignore
>>RL ID	0		9.2.1.53		YES	ignore
>>DL DPCH Information		01		Applicable to	YES	reject
7.68Mcps				7.68Mcps TDD only		
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot	М		9.2.3.39		_	
Information 7.68Mcps						
DL CCTrCH To Modify		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	0		9.2.1.58		_	
>TFCI Coding	0		9.2.3.22		_	
>Puncture Limit	0		9.2.1.50		_	
>TPC CCTrCH List		0 <maxno< td=""><td></td><td>List of uplink</td><td>_</td><td></td></maxno<>		List of uplink	_	
211 0 0011011 Elst		ofCCTrCH s>		CCTrCH which provide TPC		
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.3		_	
>DL DPCH To Modify Per RL		0 <maxno ofRLs&gt;</maxno 		See Note 1 below	_	
>>DL DPCH To Add		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot	М		9.2.3.4E		_	
Information						
>>DL DPCH To Modify		01			YES	reject
>>>Repetition Period	0		9.2.3.16		_	
>>>Repetition Length	0		9.2.3.15		_	
>>>TDD DPCH Offset	0		9.2.3.19A		_	
>>>DL Timeslot Information		0 <maxno ofDLts&gt;</maxno 		Applicable to 3.84Mcps TDD only	-	
>>>>Time Slot	М		9.2.3.23	1	_	
>>>>Midamble Shift	0		9.2.3.7		-	
And Burst Type	0		0.24.57			
>>>TFCI Presence	U	0	9.2.1.57	1	_	
>>>DL Code		0 <maxno ofdpchs=""></maxno>			_	
Information	NA	3,5, 0,132	0.2.2.5			
>>>>DPCH ID	M		9.2.3.5	1	_	
>>>>TDD	U		9.2.3.19		-	
Channelisation Code		0 4 may n=		Applicable to	CLOBAL	roisot
>>>DL Timeslot Information LCR		0 <maxno ofDLtsLCR &gt;</maxno 		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>>>>Time Slot LCR	М		9.2.3.24A	<u> </u>	_	
>>>>Midamble Shift LCR	0		9.2.3.7A			
>>>>TFCI Presence	0		9.2.1.57		_	
>>>DL Code	-	0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information LCR		ofDPCHsL CR>				

>>>>DPCH ID	М		9.2.3.5		_	
>>>>TDD	0		9.2.3.19a		_	
Channelisation Code LCR			3.2.0.100			
>>>>TDD DL DPCH Time Slot Format LCR	0		9.2.3.19D		YES	reject
>>>Maximum DL Power to Modify LCR	0		DL Power 9.2.1.21	Maximum allowed power on DPCH	YES	ignore
>>>>Minimum DL Power to Modify LCR	0		DL Power 9.2.1.21	Minimum allowed power on DPCH	YES	ignore
>>>DL Timeslot Information 7.68Mcps		0 <maxno ofDLts&gt;</maxno 		Applicable to 7.68Mcps TDD only	GLOBAL	reject
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.35		_	
>>>TFCI Presence	0		9.2.1.57		_	
>>>>DL Code Information 7.68Mcps		0 <maxno ofDPCHs7 68&gt;</maxno 			_	
>>>>DPCH ID 7.68Mcps	М		9.2.3.42		_	
>>>>TDD Channelisation Code 7.68Mcps	0		9.2.3.34		-	
>>DL DPCH To Delete		0 <maxno ofDPCHs&gt;</maxno 			GLOBAL	reject
>>>DPCH ID	М		9.2.3.5		_	
>>DL DPCH To Add LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot Information LCR	М		9.2.3.40		_	
>>TDD TPC DL Step Size	0		9.2.3.21		YES	reject
>>Maximum CCTrCH DL Power to Modify	0		DL Power 9.2.1.21		YES	ignore
>>Minimum CCTrCH DL Power to Modify >>RL ID	0		DL Power 9.2.1.21 9.2.1.53		YES YES	ignore
>>DL DPCH To Add 7.68Mcps		01	0.2.1.00	Applicable to 7.68Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16	- · · · <b>,</b>	_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot Information 7.68Mcps	M		9.2.3.39			
DL CCTrCH To Delete		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
DCHs To Modify	0		DCHs TDD To Modify 9.2.3.4D		YES	reject

DCHs To Add	0		DCH TDD		YES	reject
DOI 10 AUU			Information		1.5	roject
			9.2.3.4C			
DCHs To Delete		0 <maxno ofDCHs&gt;</maxno 			GLOBAL	reject
>DCH ID	M		9.2.1.20		_	
DSCH To Modify		0 <maxno ofDSCHs&gt;</maxno 			GLOBAL	reject
>DSCH ID	M		9.2.3.5a		_	
>CCTrCH ID	0		9.2.3.3	DL CCTrCH in which the DSCH is mapped	-	
>Transport Format Set	0		9.2.1.59		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Frame Handling Priority	0		9.2.1.30		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCH To Add	0		DSCH TDD Information 9.2.3.5A		YES	reject
DSCH To Delete		0 <maxno ofDSCHs&gt;</maxno 			GLOBAL	reject
>DSCH ID	M		9.2.3.5a		_	
USCH To Modify		0 <maxno ofUSCHs&gt;</maxno 			GLOBAL	reject
>USCH ID	M		9.2.3.27		_	
>Transport Format Set	0		9.2.1.59		_	
>Allocation/Retention Priority	0		9.2.1.1A		-	
>CCTrCH ID	0		9.2.3.3	UL CCTrCH in which the USCH is mapped	-	
>Transport Bearer Request Indicator	М		9.2.1.62A		-	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore

	0 <maxno ofUSCHs&gt; 0<maxno ofRLs&gt;</maxno </maxno 	USCH Information 9.2.3.28	See Note 1	YES GLOBAL	reject
	ofUSCHs> 0 <maxno< td=""><td></td><td>Saa Nota 1</td><td>GLOBAL _</td><td>reject</td></maxno<>		Saa Nota 1	GLOBAL _	reject
	0 <maxno< td=""><td>9.2.3.27</td><td>See Note 1</td><td>_</td><td></td></maxno<>	9.2.3.27	See Note 1	_	
			See Note 1		
			below	YES	reject
		9.2.1.53		_	
		DL Power 9.2.1.21		_	
		DL Power 9.2.1.21		_	
		DL Power 9.2.1.21		YES	ignore
		9.2.1.53G		YES	ignore
	01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
		9.2.3.26H		_	
		9.2.3.26G		_	
		9.2.3.4P	Applicable to 1.28Mcps TDD only	YES	ignore
		9.2.1.65	Applicable to 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt [15]	YES	reject
		9.2.1.55A		YES	reject
		HS-DSCH TDD Information 9.2.3.5F		YES	reject
		9.2.1.31H		YES	reject
		HS-DSCH MAC-d Flows Information 9.2.1.31IA		YES	reject
		9.2.1.31IB		YES	reject
- SDSCH adioLink		9.2.1.31J		YES	reject
		RL ID 9.2.1.53		YES	reject
		RL ID 9.2.1.53		YES	ignore
	01		3.84Mcps TDD only	YES	reject
				_	
	- SDSCH adioLink	O1  SDSCH adioLink  O1	9.2.1.21 9.2.1.53G  01  9.2.3.26H  9.2.3.26G  9.2.3.4P  9.2.1.65  9.2.1.65  HS-DSCH TDD Information 9.2.3.5F 9.2.1.31H  HS-DSCH MAC-d Flows Information 9.2.1.31IA 9.2.1.31IB  9.2.1.31J  SDSCH adioLink  RL ID 9.2.1.53 RL ID 9.2.1.53 RL ID 9.2.1.53  RL ID 9.2.1.53	9.2.1.21  9.2.1.53G  01  Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.  9.2.3.26G  9.2.3.4P  Applicable to 1.28Mcps TDD only  9.2.1.65  Applicable to 1.28Mcps TDD only  9.2.1.65  Applicable to 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt [15]  9.2.1.55A  HS-DSCH TDD Information 9.2.3.5F  9.2.1.31H  HS-DSCH MAC-d Flows Information 9.2.1.31IA  9.2.1.31IB  9.2.1.31IB  RL ID  9.2.1.53  RL ID  9.2.3.45	9.2.1.21   9.2.1.53G   YES

>E-DCH MAC-d Flows to	0		9.2.3.47		_	
Add						
>E-DCH MAC-d Flows to	0		9.2.1.73		_	
Delete						
>E-DCH Non-scheduled	0		9.2.3.48		_	
Grant Information TDD						
>E-DCH TDD Information	0		9.2.3.49		_	
>E-DCH TDD Information to	0		9.2.3.52		_	
Modify						
E-DCH Serving RL	0		9.2.1.53		YES	reject
E-DCH Information		01		7.68Mcps TDD	YES	reject
7.68Mcps				only		
>E-PUCH Information	0		9.2.3.45		_	
>E-TFCS Information TDD	0		9.2.3.46		_	
>E-DCH MAC-d Flows to	0		9.2.3.47		_	
Add						
>E-DCH MAC-d Flows to	0		9.2.1.73		_	
Delete						
>E-DCH Non-scheduled	0		9.2.3.64		_	
Grant Information 7.68Mcps						
TDD						
>E-DCH TDD Information	0		9.2.3.65		_	
7.68Mcps						
>E-DCH TDD Information to	0		9.2.3.52		_	
Modify			0.2.0.02			
E-DCH Information		01		1.28Mcps TDD	YES	reject
1.28Mcps		0		only	120	10,000
>E-PUCH Information LCR	0		9.2.3.45a	J,	_	
>E-TFCS Information TDD	0		9.2.3.46		_	
>E-DCH MAC-d Flows to	0		9.2.3.47		_	
Add			3.2.3.47			
>E-DCH MAC-d Flows to	0		9.2.1.73		_	
Delete			9.2.1.73		_	
>E-DCH Non-scheduled	0		9.2.3.48a			
Grant Information LCR TDD			9.2.3.40a		_	
>E-DCH TDD Information	0		9.2.3.49a			
LCR	0		9.2.3.498		_	
>E-DCH TDD Information to			0.0.0.50			
	0		9.2.3.52		_	
Modify Power Control GAP			INTEGED	Linite Niconale an of	VEO	
Power Control GAP	0		INTEGER	Unit: Number of	YES	ignore
			(1255)	subframes		
				Applicable to		
				1.28Mcps TDD		
CDC Information		0.4	1	only	VE0	w-!
CPC Information		01		1.28Mcps TDD	YES	reject
Continuous Dealist			0.2.2.22	only		
>Continuous Packet	0		9.2.3.93		_	
Connectivity DRX						
Information LCR			0.0.0.04			
>Continuous Packet	0		9.2.3.94		_	
Connectivity DRX						
Information To Modify LCR			0.0.0.00			
>HS-DSCH Semi-Persistent	0		9.2.3.96		_	
scheduling Information LCR			0.0.00			
>HS-DSCH Semi-Persistent	0		9.2.3.96a		_	
scheduling Information to						
modify LCR			0.0.0.400			
>HS-DSCH Semi-Persistent	0		9.2.3.100		_	
scheduling Deactivate						
Indicator LCR			0.000=			
>E-DCH Semi-Persistent	0		9.2.3.97		_	
scheduling Information LCR			0000			
>E-DCH Semi-Persistent	0		9.2.3.97a		_	
scheduling Information to						
modify LCR						
>E-DCH Semi-Persistent	0	1	9.2.3.101		_	

scheduling Deactivate Indicator LCR					
Idle Interval Information	0	9.2.3.102	TDD only	YES	Ignore
UE Selected MBMS Service Information	O	9.2.3.104	This IE indicates the Time Slot information and/or TDM information of UE selected MBMS service in the other frequency. For 1.28Mcps TDD only.	YES	ignore
HS-SCCH TPC step size	0	9.2.3.21	1.28 Mcps TDD only.	YES	ignore
HS-DSCH-RNTI for FACH	0	HS-DSCH- RNTI 9.2.1.31J	1.28 Mcps TDD only	YES	ignore

NOTE 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxnoofRLs are represented by separate ASN.1 structures with different criticalities.

Condition	Explanation
HSDSCHRadioLink	The IE shall be present if HS-PDSCH RL ID IE is present.

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE
maxnoofDPCHs	Maximum number of DPCHs in one CCTrCH for 3.84Mcps TDD.
	Maximum number of uplink DPCHs in one CCTrCH for 7.68Mcps TDD
maxnoofDPCHsLCR	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD
maxnoofDPCHs768	Maximum number of downlink DPCHs in one CCTrCH for 7.68Mcps
	TDD
maxnoofDSCHs	Maximum number of DSCHs for one UE
maxnoofUSCHs	Maximum number of USCHs for one UE
maxnoofDLts	Maximum number of Downlink time slots per Radio Link for 3.84Mcps
	TDD
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps
	TDD
maxnoofULts	Maximum number of Uplink time slots per Radio Link for 3.84Mcps TDD
maxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD
maxnoofRLs	Maximum number of RLs for one UE

## 9.1.43 RADIO LINK RECONFIGURATION READY

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
<b>RL Information Response</b>		0 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>DCH Information	0		9.2.1.20C		YES	ignore
Response						
>DSCH Information	0		9.2.3.5b	TDD only	YES	ignore
Response						
>USCH Information Response	0		9.2.3.29	TDD only	YES	ignore
>Not Used	0		NULL		_	
>DL Power Balancing	0		9.2.2.12D		YES	ignore
Updated Indicator						
>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>E-DCH FDD DL Control	0		9.2.2.13Dc		YES	ignore
Channel Information						
>E-DCH FDD Information	0		9.2.2.13Db		YES	ignore
Response	0		9.2.2.111		YES	ignore
>HS-DSCH			9.2.2.111		123	ignore
Preconfiguration Info >Non-Serving RL	0		9.2.2.126		YES	ignore
Preconfiguration Info			0.2.2.120		120	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Target Communication	0		Communica		YES	ignore
Control Port ID			tion Control Port ID 9.2.1.15		. =0	ignore
HS-DSCH FDD Information	0		9.2.2.18E	FDD only	YES	ignore
Response						
HS-DSCH TDD Information Response	0		9.2.3.5G	TDD only	YES	ignore
E-DCH TDD Information Response	0		E-DCH TDD Information Response 9.2.3.50	TDD only	YES	ignore
MAC-hs Reset Indicator	0		9.2.1.38Ac		YES	ignore
Fast Reconfiguration Permission	0		9.2.2.63	FDD only	YES	ignore
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.69	FDD only	YES	ignore
Additional HS Cell Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID		_	
			9.2.1.53			

T.				,	
>HS-DSCH FDD	M	9.2.2.18EA	FDD only	_	
Secondary Serving					
Information Response					
Continuous Packet	0	9.2.3.95	1.28 Mcps TDD	YES	ignore
Connectivity DRX Information			only		
Response LCR					
HS-DSCH Semi-Persistent	0	9.2.3.98	1.28 Mcps TDD	YES	ignore
scheduling Information			only		
Response LCR					
E-DCH Semi-Persistent	0	9.2.3.99	1.28 Mcps TDD	YES	ignore
scheduling Information			only		
Response LCR					
E-RNTI for FACH	0	E-RNTI	1.28 Mcps TDD	YES	ignore
		9.2.1.75	only		

Range Bound Explanation			
maxnoofRLs	Maximum number of RLs for a UE		
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE		

## 9.1.44 RADIO LINK RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Orthodity
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
CHOICE Cause Level	M				YES	ignore
>General						
>>Cause	M		9.2.1.6		YES	ignore
>RL Specific						
>>RLs Causing Reconfiguration Failure		0 <maxno ofRLs&gt;</maxno 			EACH	ignore
>>>RL ID	M		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation			
maxnoofRI s	Maximum number of RLs for a UF			

### 9.1.45 RADIO LINK RECONFIGURATION COMMIT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		-	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
CFN	М		9.2.1.7		YES	ignore
Active Pattern Sequence Information	0		9.2.2.A	FDD only	YES	ignore
Fast Reconfiguration Mode	0		9.2.2.62	FDD only	YES	reject

## 9.1.46 RADIO LINK RECONFIGURATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		-	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore

## 9.1.47 RADIO LINK RECONFIGURATION REQUEST

## 9.1.47.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58	For the UL.	-	
>UL DPDCH Indicator For E-DCH Operation	0		9.2.2.61		YES	reject
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58	For the DL.	_	,
>TFCI Signalling Mode	0		9.2.2.50		_	
>Limited Power Increase	0		9.2.2.18A		_	
DCHs To Modify	0		DCHs FDD To Modify 9.2.2.4E		YES	reject
DCHs To Add	0		DCH FDD Information 9.2.2.4D		YES	reject
DCHs To Delete		0 <maxno ofDCHs&gt;</maxno 			GLOBAL	reject
>DCH ID	М		9.2.1.20		_	
Radio Link Information		0 <maxno ofRLs&gt;</maxno 			EACH	reject
>RL ID	M		9.2.1.53		_	
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH or on F-DPCH	-	
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH or on F-DPCH	-	
>DL Code Information	C-SF/2		FDD DL Code Information 9.2.2.14A		_	
>DL Reference Power	0		DL Power 9.2.1.21	Power on DPCH or on F- DPCH	YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
>RL Specific E-DCH Information	0		9.2.2.39a		YES	ignore
>F-DPCH Slot Format	0		9.2.2.93		YES	reject
>HS-DSCH Preconfiguration Setup	0		9.2.2.112		YES	ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.125		YES	ignore
>Non-Serving RL Preconfiguration Removal	0		Non- Serving RL Preconfigur		YES	ignore

	I	1	ation Setup		
			9.2.2.125		
Transmission Gap Pattern Sequence Information	0		9.2.2.53A	YES	reject
Signalling Bearer Request	0		9.2.1.55A	YES	reject
Indicator HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.18D	YES	reject
HS-DSCH Information To Modify Unsynchronised	0		9.2.1.31HA	YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.31IA	YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.31IB	YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J	YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.53	YES	reject
E-DPCH Information		01		YES	reject
>Maximum Set of E- DPDCHs	0		9.2.2.20C	1	-
>Puncture Limit	0		9.2.1.50	_	
>E-TFCS Information	0		9.2.2.13Dh	_	
>E-TTI	0		9.2.2.13Di	_	
>E-DPCCH Power Offset	0		9.2.2.13Dj	_	
>E-RGCH 2-Index-Step	0		9.2.2.13lg	_	
Threshold >E-RGCH 3-Index-Step	0		9.2.2.13lh	_	
Threshold					
>HARQ Info for E-DCH	0		9.2.2.18ba	-	
>HS-DSCH Configured Indicator	0		9.2.2.18Ca	_	
> Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.114	YES	ignore
E-DCH FDD Information	0		E-DCH FDD Information 9.2.2.13Da	YES	reject
E-DCH FDD Information To Modify	0		9.2.2.13Df	YES	reject
E-DCH MAC-d Flows To Add	0		E-DCH FDD MAC-d Flows Information 9.2.2.13M	YES	reject
E-DCH MAC-d Flows To Delete	0		9.2.1.73	YES	reject
Serving E-DCH RL	0		9.2.2.48B	YES	reject
CPC Information		01		YES	reject
>Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.66	-	
>Continuous Packet Connectivity DTX-DRX Information To Modify	0		9.2.2.67	-	
>Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.68	-	

>Continuous Packet Connectivity HS-SCCH less Deactivate Indicator	0		9.2.2.69A		YES	reject
No of Target Cell HS-SCCH Order	0		INTEGER (130)		YES	ignore
Additional HS Cell Information RL Reconf Req		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		-	
>C-ID	0		9.2.1.9		_	
>HS-DSCH FDD Secondary Serving Information	0		9.2.2.18Da		-	
>HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised	0		9.2.2.18EC		-	
>HS-DSCH Secondary Serving Remove	0		NULL		_	

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofRLs	Maximum number of RLs for a UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

Condition	Explanation
SF/2	The IE shall be present if the Transmission Gap Pattern Sequence
	Information IE is included and the indicated Downlink Compressed
	Mode method for at least one of the included Transmission Gap Pattern
	Sequence is set to "SF/2".
HSDSCH Radio Link	The IE shall be present if HS-PDSCH RL ID IE is present.

# 9.1.47.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL CCTrCH To Modify		0 <maxno ofCCTrCH s&gt;</maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	0		9.2.1.58		_	
>Puncture Limit	0		9.2.1.50		_	
>UL SIR Target	0		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	reject
UL CCTrCH To Delete		0 <maxno ofCCTrCH s&gt;</maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		_	
DL CCTrCH To Modify		0 <maxno ofCCTrCH s&gt;</maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	0		9.2.1.58		_	
>Puncture Limit	0		9.2.1.50		_	
>DL CCTrCH To Modify Per RL		0 <maxno ofRLs&gt;</maxno 		See note 1 below		
>>DL DPCH To Modify LCR		01		Applicable to 1.28Mcps TDD only	YES	ignore
>>>DL Timeslot Information LCR		0 <maxno ofDLtsLCR &gt;</maxno 			-	
>>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH	_	
>>>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH	_	
>>CCTrCH Maximum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>>CCTrCH Minimum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>>RL ID	0		9.2.1.53		YES	ignore
DL CCTrCH To Delete		0 <maxno ofCCTrCH s&gt;</maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		-	
DCHs To Modify	0		DCHs TDD To Modify 9.2.3.4D		YES	reject
DCHs To Add	0		DCH TDD Information 9.2.3.4C		YES	reject
DCHs To Delete		0 <maxno ofDCHs&gt;</maxno 			GLOBAL	reject

>DCH ID	М		9.2.1.20		-	
RL Information		0 <maxno ofRLs&gt;</maxno 		See note 1 below	YES	reject
>RL ID	М		9.2.1.53		_	
>Maximum Downlink Power	0		DL Power 9.2.1.21		_	
>Minimum Downlink Power	0		DL Power 9.2.1.21		_	
>RL Specific DCH	0		9.2.1.53G		YES	ignore
Information		0.4		NA	VEO	
>UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
>>Uplink Synchronisation Step Size	M		9.2.3.26H		-	
>>Uplink Synchronisation Frequency	M		9.2.3.26G		-	
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	reject
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH Information To Modify Unsynchronised	0		9.2.1.31HA		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.31IA		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.31IB		YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.53		YES	reject
E-DCH Information		01		3.84Mcps TDD only	YES	reject
>E-PUCH Information	0		9.2.3.45		_	
>E-TFCS Information TDD	0		9.2.3.46			
>E-DCH MAC-d Flows to Add	0		9.2.3.47		-	
>E-DCH MAC-d Flows to Delete	0		9.2.1.73		_	
>E-DCH Non-scheduled Grant Information TDD	0		9.2.3.48		-	
>E-DCH TDD Information	0		9.2.3.49		_	
>E-DCH TDD Information to Modify	0		9.2.3.52		_	
E-DCH Serving RL	0		9.2.1.53		YES	reject
E-DCH Information 7.68Mcps		01		7.68Mcps TDD only	YES	reject
>E-PUCH Information	0		9.2.3.45		_	
>E-TFCS Information TDD	0		9.2.3.46		_	
>E-DCH MAC-d Flows to Add	0		9.2.3.47		-	
>E-DCH MAC-d Flows to Delete	0		9.2.1.73		-	
>E-DCH Non-scheduled Grant Information 7.68Mcps TDD	0		9.2.3.64		_	

	1	1		1	1	1
>E-DCH TDD Information 7.68Mcps	0		9.2.3.65		_	
>E-DCH TDD Information to Modify	0		9.2.3.52		-	
E-DCH Information 1.28Mcps		01		1.28Mcps TDD only	YES	reject
>E-PUCH Information LCR	0		9.2.3.45a	,	_	
>E-TFCS Information TDD	0		9.2.3.46		_	
>E-DCH MAC-d Flows to	0		9.2.3.47		_	
>E-DCH MAC-d Flows to Delete	0		9.2.1.73		_	
>E-DCH Non-scheduled	0		9.2.3.48a		_	
SE-DCH TDD Information	0		9.2.3.49a		_	
LCR			0.0050			
>E-DCH TDD Information to Modify	0		9.2.3.52		_	
Power Control GAP	0		INTEGER (1255)	Unit: Number of subframes Applicable to 1.28Mcps TDD only	YES	ignore
CPC Information		01			YES	reject
>Continuous Packet Connectivity DRX Information LCR	0		9.2.3.93		_	
>Continuous Packet Connectivity DRX	0		9.2.3.94		_	
Information To Modify LCR >HS-DSCH Semi-Persistent scheduling Information LCR	0		9.2.3.96		_	
>HS-DSCH Semi-Persistent scheduling Information to modify LCR	0		9.2.3.96a		_	
>HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR	0		9.2.3.100		YES	reject
>E-DCH Semi-Persistent scheduling Information LCR	0		9.2.3.97		_	
>E-DCH Semi-Persistent scheduling Information to modify LCR	0		9.2.3.97a		_	
>E-DCH Semi-Persistent scheduling Deactivate	0		9.2.3.101		YES	reject
Indicator LCR Idle Interval Information	0	1	9.2.3.102	TDD only	YES	Ignore
UE Selected MBMS Service Information	0		9.2.3.104	This IE indicates the Time Slot information and/or TDM information of UE selected MBMS service in the other frequency. For 1.28Mcps TDD only.	YES	ignore
HS-SCCH TPC step size	О		9.2.3.21	1.28 Mcps TDD only. This IE is mandatory if " E-DCH Information 1.28Mcps" IE is absent.	YES	ignore

HS-DSCH-RNTI for FACH	0		HS-DSCH- RNTI	1.28 Mcps TDD only	YES	ignore
			9.2.1.31J			
NOTE 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through						
maxnoofRLs are represented by separate ASN.1 structures with different criticality.						

Range Bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofRLs	Maximum number of RLs for one UE

Condition	Explanation
HSDSCHRadioLink	The IE shall be present if HS-PDSCH RL ID IE is present.

### 9.1.48 RADIO LINK RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
RL Information Response		0 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	M		9.2.1.53		_	
>DCH Information	0		9.2.1.20C		YES	ignore
Response						
>DL Power Balancing	0		9.2.2.12D	FDD only	YES	ignore
Updated Indicator						
>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>E-DCH FDD DL Control	0		9.2.2.13Dc		YES	ignore
Channel Information >E-DCH FDD Information	0		9.2.2.13Db		YES	ignore
			0.2.2.1000		120	ignore
Response >HS-DSCH	0		9.2.2.111		YES	ignore
Preconfiguration Info			0.2.2.111		120	ignore
-	0		9.2.2.126		YES	ignore
>Non-Serving RL Preconfiguration Info			0.2.2.120		120	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Target Communication	0		Communica		YES	ignore
Control Port ID			tion Control Port ID 9.2.1.15		123	ignore
HS-DSCH FDD Information Response	0		9.2.2.18E	FDD only	YES	ignore
HS-DSCH TDD Information Response	0		9.2.3.5G	TDD only	YES	ignore
E-DCH TDD Information Response	0		E-DCH TDD Information Response 9.2.3.50	TDD only	YES	ignore
MAC-hs Reset Indicator	0		9.2.1.38Ac		YES	ignore
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.69	FDD only	YES	ignore
Additional HS Cell Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
>HS-DSCH FDD Secondary Serving	М		9.2.2.18EA	FDD only	_	
Information Response  Continuous Packet  Connectivity DRX Information	0		9.2.3.95	1.28 Mcps TDD only	YES	ignore
Response LCR						
HS-DSCH Semi-Persistent	0		9.2.3.98	1.28 Mcps TDD	YES	ignore

scheduling Information			only		
Response LCR					
E-DCH Semi-Persistent	0	9.2.3.99	1.28 Mcps TDD	YES	ignore
scheduling Information			only		
Response LCR					
E-RNTI for FACH	0	E-RNTI	1.28 Mcps TDD	YES	ignore
		9.2.1.75	only		

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for a UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.49 RADIO LINK DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
CRNC Communication Context ID	М		9.2.1.18		YES	reject
RL Information		1 <maxno ofRLs&gt;</maxno 			EACH	notify
>RL ID	M		9.2.1.53		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of radio links for one UE

# 9.1.50 RADIO LINK DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.51 DL POWER CONTROL REQUEST [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		-	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Power Adjustment Type	М		9.2.2.27		YES	ignore
DL Reference Power	C- Common		DL power 9.2.1.21	Power on DPCH or on F-DPCH	YES	ignore
Inner Loop DL PC Status	0		9.2.2.18B		YES	ignore
DL Reference Power Information	C- Individual	1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>DL Reference Power	M		DL power 9.2.1.21	Power on DPCH or on F-DPCH	-	
Max Adjustment Step	C- CommonO rIndividual		9.2.2.20		YES	ignore
Adjustment Period	C- CommonO rIndividual		9.2.2.B		YES	ignore
Adjustment Ratio	C- CommonO rIndividual		9.2.2.C		YES	ignore

Condition	Explanation
Common	The IE shall be present if the Adjustment Type IE is equal to "Common".
Individual	The IE shall be present if the Adjustment Type IE is equal to "Individual".
CommonOrIndividual	The IE shall be present if the Adjustment Type IE is equal to "Common"
	or "Individual".

Range Bound	Explanation
maxnoofRLs	Maximum number of Radio Links for a UE

### 9.1.52 DEDICATED MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used when the Report characteristics type is set to "On Demand".	YES	reject
Measurement ID	M		9.2.1.42		YES	reject
CHOICE Dedicated  Measurement Object Type  >RL	M				YES	reject
>RL Information		1 <maxno ofRLs&gt;</maxno 			EACH	reject
>>>RL ID	М		9.2.1.53		_	
>>>DPCH ID	0		9.2.3.5	TDD only	_	
>>>PUSCH Information		0 <maxno ofPUSCHs &gt;</maxno 		TDD only	GLOBAL	reject
>>>PUSCH ID	М		9.2.3.12		_	
>>>HS-SICH Information		0 <maxno ofHSSICH s&gt;</maxno 		TDD only	GLOBAL	reject
>>>>HS-SICH ID	M		9.2.3.5Gb	For 1.28Mcps TDD, if the Extended HS- SICH ID IE is included in the HS-SICH Information IE, the HS-SICH ID IE shall be ignored	_	
>>>>Extended HS-SICH ID	0		9.2.3.5K	Applicable to 1.28Mcps TDD only, the Extended HS- SICH ID IE shall be used if the HS-SICH identity has a value larger than 31. See note 1 below.	_	
>>>DPCH ID 7.68Mcps	0		9.2.3.42	Included for 7.68Mcps TDD	YES	reject
				for downlink		
>RLS				DPCH FDD only		

		ofRLSets>				
>>>RL Set ID	M		9.2.2.39		_	
>ALL RL			NULL			
>ALL RLS			NULL	FDD only		
Dedicated Measurement Type	M		9.2.1.23		YES	reject
Measurement Filter Coefficient	0		9.2.1.41		YES	reject
Report Characteristics	M		9.2.1.51		YES	reject
CFN Reporting Indicator	M		FN Reporting Indicator 9.2.1.29B		YES	reject
CFN	0		9.2.1.7		YES	reject
Number Of Reported Cell Portions	C- BestCellP ortionsMe as		9.2.2.23D	FDD only	YES	reject
Measurement Recovery Behavior	0		9.2.1.43A		YES	ignore
Alternative Format Reporting Indicator	0		9.2.1.1B		YES	ignore
Note 1: This information ele	ment is a simpli	fied represen	tation of the A	SN.1.		

Condition	Explanation
BestCellPortionsMeas	The IE shall be present if the Dedicated Measurement Type IE is set to
	"Best Cell Portions".

Range Bound	Explanation
maxnoofRLs	Maximum number of individual RLs a measurement can be started on
maxnoofPUSCHs	Maximum number of PUSCHs per RL a measurement can be started on
maxnoofRLSets	Maximum number of individual RL Sets a measurement can be started
	on
maxnoofHSSICHs	Maximum number of HSSICHs per RL a measurement can be started
	on

### 9.1.53 DEDICATED MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		-	
CRNC Communication Context ID	М		9.2.1.18		YES	ignore
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Dedicated  Measurement Object Type	0			Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
>RL or ALL RL				See Note 1		
>>RL Information		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>DPCH ID	0		9.2.3.5	TDD only	_	
>>>Dedicated Measurement Value	М		9.2.1.24		_	
>>>CFN	0		9.2.1.7	Dedicated Measurement Time Reference	_	
>>>PUSCH Information		0 <maxno ofPUSCHs &gt;</maxno 		TDD only See note 3	GLOBAL	reject
>>>>PUSCH ID	М		9.2.3.12		_	
>>>>Dedicated Measurement Value	0		9.2.1.24		_	
>>>HS-SICH ID	0		9.2.3.5Gb	TDD only For 1.28Mcps TDD, if the Extended HS- SICH ID IE is included in the HS-SICH Information IE, the HS-SICH ID IE shall be ignored	YES	reject
>>>Multiple Dedicated Measurement Value Information		0 <maxno ofDPCHsP erRL-1&gt;</maxno 		Applicable to 3.84Mcps TDD only	GLOBAL	ignore
>>>DPCH ID	M		9.2.3.5		_	
>>>Dedicated Measurement Value	М		9.2.1.24		_	
>>>Multiple Dedicated Measurement Value Information LCR		0 <maxno ofDPCHsL CRPerRL- 1&gt;</maxno 		Applicable to 1.28McpsTDD only	GLOBAL	ignore
>>>DPCH ID	M		9.2.3.5		_	
>>>>Dedicated Measurement Value	М		9.2.1.24		_	
>>>Multiple HS-SICH		0 <maxno< td=""><td></td><td>TDD only</td><td>GLOBAL</td><td>ignore</td></maxno<>		TDD only	GLOBAL	ignore

Measurement Value Information		ofHSSICH s -1>				
>>>HS-SICH ID	M		9.2.3.5Gb	For 1.28Mcps TDD, if the Extended HS- SICH ID IE is included in the HS-SICH Information IE, the HS-SICH ID IE shall be ignored	_	
>>>Dedicated Measurement Value	М		9.2.1.24		-	
>>>Extended HS- SICH ID	0		9.2.3.5K	Applicable to 1.28Mcps TDD only, the Extended HS- SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	YES	ignore
>>>DPCH ID 7.68Mcps	0		9.2.3.42	Included for 7.68Mcps TDD for downlink DPCH	YES	reject
>>>Multiple Dedicated Measurement Value Information 768Mcps		0 <maxno ofDPCHs7 68PerRL- 1&gt;</maxno 		Applicable to 7.68McpsTDD only	GLOBAL	ignore
>>>DPCH ID 7.68Mcps	М		9.2.3.42		-	
>>>Dedicated Measurement Value	M		9.2.1.24		ı	
>>>Extended HS-SICH ID	0		9.2.3.5K	Applicable to 1.28Mcps TDD only, the Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	YES	reject
>RLS or ALL RLS				FDD only See Note 2		
>>RL Set Information		1 <maxno ofrlsets=""></maxno>			EACH	ignore
>>>RL Set ID	М		9.2.2.39		_	
>>>Dedicated Measurement Value	М		9.2.1.24		_	
>>>CFN	0		9.2.1.7	Dedicated Measurement Time Reference	-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Measurement Recovery	0		9.2.1.43C		YES	ignore

Support I	Indicator							
Note 1:	e 1: This is a simplified representation of the ASN.1: there are two different choice tags "RL" and "ALL RL" in the							
	ASN.1, each having exactly the same structure.							
Note 2:	This is a simplified representation of the ASN.1: there are two different choice tags "RLS" and "ALL RLS" in							
	the ASN.1, each having exactly the same structure.							
Note 3:	This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through							
	maxnoofPUSCHs are represented by separate ASN.1 structures with different criticality.							

Range Bound	Explanation
maxnoofRLs	Maximum number of individual RLs the measurement can be started on
maxnoofPUSCHs	Maximum number of PUSCHs per RL a measurement can be started on
maxnoofRLSets	Maximum number of individual RL Sets a measurement can be started on
maxnoofDPCHsPerRL	Maximum number of DPCHs per RL a measurement can be started on for 3.84Mcps TDD
maxnoofDPCHsLCRPerRL	Maximum number of DPCHs per RL a measurement can be started on for 1.28Mcps TDD
maxnoofHSSICHs	Maximum number of HSSICHs per RL a measurement can be started on
maxnoofDPCHs768PerRL	Maximum number of DPCHs per RL a measurement can be started on for 7.68Mcps TDD

### 9.1.54 DEDICATED MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18		YES	ignore
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ianore

### 9.1.55 DEDICATED MEASUREMENT REPORT

1 <maxno ofRLs&gt;</maxno 	9.2.1.45 9.2.1.46 9.2.1.62 9.2.1.18	The reserved value "All CRNCCC" shall not be used.  Dedicated Measurement Object Type the measurement was initiated with See Note 1	YES YES YES	ignore ignore ignore ignore
	9.2.1.62 9.2.1.18	value "All CRNCCC" shall not be used.  Dedicated Measurement Object Type the measurement was initiated with	- YES	ignore ignore
	9.2.1.18	value "All CRNCCC" shall not be used.  Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
		value "All CRNCCC" shall not be used.  Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
	9.2.1.42	Measurement Object Type the measurement was initiated with		
		Measurement Object Type the measurement was initiated with	YES	ignore
		See Note 1		
			EACH	ignore
1	9.2.1.53		_	
<del></del>	9.2.3.5	TDD only	_	
	9.2.1.24A		-	
0 <maxno ofPUSCHs &gt;</maxno 		TDD only See note 3	GLOBAL	reject
	9.2.3.12		_	
	9.2.1.24		ı	
	9.2.3.5Gb	TDD only For 1.28Mcps TDD, if the Extended HS- SICH ID IE is included in the HS-SICH Information IE, the HS-SICH ID IE shall be ignored	YES	reject
	9.2.3.42	Included for 7.68Mcps TDD for downlink DPCH	YES	reject
	9.2.3.5K	Applicable to 1.28Mcps TDD only, the Extended HS- SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	YES	ignore
			Information IE, the HS-SICH ID IE shall be ignored  9.2.3.42 Included for 7.68Mcps TDD for downlink DPCH  9.2.3.5K Applicable to 1.28Mcps TDD only, the Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	Information IE, the HS-SICH ID IE shall be ignored  9.2.3.42 Included for 7.68Mcps TDD for downlink DPCH  9.2.3.5K Applicable to 1.28Mcps TDD only, the Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger

				See Note 2		
>>RL Set Information		1 <maxno ofrlsets=""></maxno>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		_	
>>>Dedicated Measurement Value Information	М		9.2.1.24A		_	
Measurement Recovery Reporting Indicator	0		9.2.1.43B		YES	ignore

- Note 1: This is a simplified representation of the ASN.1: there are two different choice tags "RL" and "ALL RL" in the ASN.1, each having exactly the same structure.
- Note 2: This is a simplified representation of the ASN.1: there are two different choice tags "RLS" and "ALL RLS" in the ASN.1, each having exactly the same structure.
- Note 3: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxnoofPUSCHs are represented by separate ASN.1 structures with different criticality.

Range Bound	Explanation
maxnoofRLs	Maximum number of individual RLs the measurement can be started on
maxnoofPUSCHs	Maximum number of PUSCHs per RL a measurement can be started on
maxnoofRLSets	Maximum number of individual RL Sets a measurement can be started
	on

#### 9.1.56 DEDICATED MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall be used if this value was used when initiating the measurement. Otherwise, the reserved value "All NBCC" shall not be used.	YES	ignore
Measurement ID	M		9.2.1.42		YES	ignore

### 9.1.57 DEDICATED MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall be used if the Node B Communication Context ID was set to "All NBCC" when initiating the measurement. Otherwise, the reserved value "All CRNCCC" shall not be used.	YES	ignore
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

### 9.1.58 RADIO LINK FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
CHOICE Reporting Object	M			Object for which the Failure shall be reported.	YES	ignore
>RL						
>>RL Information		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
>RL Set				FDD only		
>>RL Set Information		1 <maxno ofRLSets&gt;</maxno 			EACH	ignore
>>>RL Set ID	М		9.2.2.39		_	
>>>Cause	M		9.2.1.6		_	
>CCTrCH				TDD only		
>>RL ID	M		9.2.1.53		-	
>>CCTrCH List		1 <maxno ofCCTrCH s&gt;</maxno 			EACH	ignore
>>>CCTrCH ID	M		9.2.3.3		_	
>>>Cause	M		9.2.1.6			

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofRLSets	Maximum number of RL Sets for one UE
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE

### 9.1.59 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
CHOICE Reporting Object	М			Object for which the Restoration shall be reported.	YES	ignore
>RL				TDD only		
>>Radio Link Information		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>RL Set				FDD only		
>>RL Set Information		1 <maxno ofRLSets&gt;</maxno 			EACH	ignore
>>>RL Set ID	М		9.2.2.39		1	
>CCTrCH				TDD only		
>>RL ID	M		9.2.1.53		-	
>>CCTrCH List		1 <maxno ofCCTrCH s&gt;</maxno 			EACH	ignore
>>>CCTrCH ID	М		CCTrCH ID 9.2.3.3		-	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofRLSets	Maximum number of RL Sets for one UE
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE

# 9.1.60 COMPRESSED MODE COMMAND [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Active Pattern Sequence Information	М		9.2.2.A		YES	ignore

#### 9.1.61 ERROR INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	0		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	0		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Cause	0		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

### 9.1.62 PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST

#### 9.1.62.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
SFN	0		9.2.1.53A		YES	reject
HS-PDSCH, HS-SCCH,E-AGCH, E-RGCH and E-HICH Total Power	0		Maximum Transmissio n Power 9.2.1.40	Maximum transmission power to be allowed for HS- PDSCH, HS- SCCH, E- AGCH, E- RGCH and E- HICH codes	YES	reject
HS-PDSCH And HS-SCCH Scrambling Code	0		DL Scrambling Code 9.2.2.13	Scrambling code on which HS-PDSCH and HS-SCCH is transmitted. 0= Primary scrambling code of the cell 115 = Secondary scrambling code	YES	reject
HS-PDSCH FDD Code Information	0		9.2.2.18F		YES	reject
HS-SCCH FDD Code Information	0		9.2.2.18G		YES	reject

E 400114 LE B0011/E		T	5.	0 11	YES	roiget
E-AGCH And E-RGCH/E-	0		DL	Scrambling	YES	reject
HICH FDD Scrambling Code			Scrambling	code on which		
			Code	E-AGCH, E-		
			9.2.2.13	RGCH and E-		
				HICH are		
				transmitted.		
				0= Primary scrambling		
				code of the cell		
				115 =		
				Secondary		
				scrambling code		
E-AGCH Code FDD	0		9.2.2.13lb	000.0	YES	reject
Information						
E-RGCH/E-HICH Code FDD	0		9.2.2.13la		YES	reject
Information						
HSDPA And E-DCH Cell		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
Portion Information		ofCellPorti				
Coll Portion ID	M	ons>	9.2.2.1Ca		_	
>Cell Portion ID >HS-PDSCH And HS-	0		DL	Scrambling	_	
SCCH Scrambling Code			Scrambling	code on which		
30011 Scrambling Code			Code	HS-PDSCH		
			9.2.2.13	and HS-SCCH		
				is transmitted		
				over cell portion.		
>HS-PDSCH FDD Code	0		9.2.2.18F	portioni	_	
Information						
>HS-SCCH FDD Code	0		9.2.2.18G		_	
Information						
>HS-PDSCH, HS-SCCH, E-	0		Maximum	Maximum	_	
AGCH, E-RGCH and E-			Transmissio	transmission		
HICH Total Power			n Power	power to be allowed for HS-		
			9.2.1.40	PDSCH, HS-		
				SCCH and E-		
				AGCH, E-		
				RGCH and E-		
				HICH codes over cell portion		
				over cell portion		
>E-AGCH And E-RGCH/E-	0		DL	Scrambling	-	
HICH FDD Scrambling			Scrambling	code on which		
Code			Code	E-AGCH, E- RGCH and E-		
			9.2.2.13	HICH are		
				transmitted		
				over cell		
>E-AGCH Code FDD	0		9.2.2.13lb	portion.	_	
>E-AGCH Code FDD   Information			J.∠.∠. I 3ID			
>E-RGCH/E-HICH Code	0		9.2.2.13la		_	
FDD Information						
Maximum Target Received	0		9.2.2.21a		YES	reject
Total Wide Band Power			00000		\	
Reference Received Total	0		9.2.2.39B		YES	ignore
Wide Band Power	0		9.2.2.21b		YES	roinet
Target Non-serving E-DCH to			9.2.2.210		1 = 5	reject
Total E-DCH Power ratio	0		9.2.2.75		YES	reject
HS-DSCH Common System Information			3.2.2.13		ILO	reject
แบบแลแบบ	1	I		l		

Common MAC Flows to Delete	0	9.2.2.97	YES	reject
HS-DSCH Paging System Information	0	9.2.2.76	YES	reject
Paging MAC Flows to Delete	0	9.2.2.98	YES	reject
Common E-DCH System Information	0	9.2.2.103	YES	Reject
Common UL MAC Flows to Delete	0	Common MAC Flows to Delete 9.2.2.97	YES	Reject
Common E-DCH MAC-d Flows to Delete	0	E-DCH MAC Flows to Delete 9.2.1.73	YES	Reject
Enhanced UE DRX Information	0	9.2.2.108	YES	reject

Range Bound	Explanation
MaxNoofCellPortions	Maximum number of Cell Portions in a cell

### 9.1.62.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
SFN	0		9.2.1.53A		YES	reject
PDSCH Sets To Add		0 <maxno ofPDSCH Sets&gt;</maxno 			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		_	
>PDSCH To Add Information		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD Physical Channel Offset	М		9.2.3.20		_	
>>DL Timeslot		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofDLts>				
>>>Time Slot	M		9.2.3.23		_	
>>>Midamble Shift And Burst Type	М		9.2.3.7		_	
>>>TFCI Presence	М		9.2.1.57		_	
>>>DL Code Information		1 <maxno ofPDSCHs &gt;</maxno 			-	
>>>PDSCH ID	M		9.2.3.10		_	
>>>TDD Channelisation Code	М		9.2.3.19		-	

>PDSCH To Add Information LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16	7.00IVICPS TDD.	_	
•	M		9.2.3.15		_	
>>Repetition Length >>TDD Physical	M		9.2.3.20		_	
Channel Offset	IVI		0.2.0.20			
>>DL Timeslot Information LCR		1 <maxno ofDLtsLCR &gt;</maxno 			_	
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble Shift LCR	M		9.2.3.7A		_	
>>>TFCI Presence	М		9.2.1.57		_	
>>>DL Code Information LCR		1 <maxno ofPDSCHs &gt;</maxno 			-	
>>>>PDSCH ID	М		9.2.3.10		-	
>>>TDD Channelisation Code LCR	M		9.2.3.19a		_	
>>>TDD DL DPCH Time Slot Format LCR	0		9.2.3.19D		YES	reject
>>TSTD Indicator	0		9.2.1.64		YES	reject
>PDSCH To Add Information 7.68Mcps		01		Mandatory for 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD or 3.84Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		-	
>>TDD Physical Channel Offset	М		9.2.3.20		_	
>>DL Timeslot		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information 7.68Mcps		ofDLts>				
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.35		-	
>>>TFCI Presence	М		9.2.1.57		-	
>>>DL Code Information 7.68Mcps		1 <maxno ofPDSCHs &gt;</maxno 			-	
>>>PDSCH ID 7.68Mcps	М		9.2.3.43		_	
>>>TDD Channelisation Code 7.68Mcps	М		9.2.3.34		_	
PDSCH Sets To Modify		0 <maxno of PDSCHSe ts&gt;</maxno 			GLOBAL	reject
>PDSCH Set ID	М		9.2.3.11		_	

>CHOICE HCR or LCR or	М	<u> </u>		See note 1	T	
7.68 Mcps	IVI			below	_	
>>3.84Mcps TDD				Delow		
>>>PDSCH To Modify		1			YES	reject
Information		,			120	10,000
>>>Repetition	0		9.2.3.16		_	
Period						
>>>Repetition	0		9.2.3.15		_	
Length						
>>>>TDD Physical	0		9.2.3.20		_	
Channel Offset						
>>>>DL Timeslot		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofDLts>				
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble	0		9.2.3.7		_	
Shift And Burst						
Туре						
>>>>TFCI	0		9.2.1.57		_	
Presence						
>>>>DL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofPDSCHs				
	NA.	>	9.2.3.10			
>>>>PDSCH	М		9.2.3.10		_	
ID	M		0.0.0.40			
>>>>TDD	IVI		9.2.3.19		_	
Channelisation						
Code >>1.28Mcps TDD						
>>7.26MCpS TDD		1			YES	reject
Information LCR		,			120	reject
>>>Repetition	0		9.2.3.16		_	
>>>Repetition Period			3.2.3.10			
>>>Repetition	0		9.2.3.15		_	
Length			0.2.0.10			
>>>>TDD Physical	0		9.2.3.20		_	
Channel Offset			0.2.0.20			
>>>DL Timeslot		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information LCR		ofDLtsLCR				
mormation 2010		>				
>>>>Time Slot	М		9.2.3.24A		_	
LCR						
>>>>Midamble	0		9.2.3.7A		_	
Shift LCR						
>>>>TFCI	0		9.2.1.57		_	
Presence					1	
>>>>DL Code		0 <maxno ofpdschs<="" td=""><td></td><td></td><td>_</td><td></td></maxno>			_	
Information LCR		> OIPDSCHS				
>>>>PDSCH	М	-	9.2.3.10		_	
ID						
>>>>TDD	М		9.2.3.19a		<del> </del> -	
Channelisation						
Code LCR						
>>>>TDD DL	0		9.2.3.19D		YES	reject
DPCH Time Slot						-
Format LCR						
>>7.68Mcps TDD					_	
>>>PDSCH To Modify		1			YES	reject
Information 7.68Mcps						
	1	1	1	I .	1	1

_			,	1		
>>>Repetition Period	0		9.2.3.16		-	
>>>Repetition Length	0		9.2.3.15		-	
>>>>TDD Physical Channel Offset	0		9.2.3.20		-	
>>>>DL Timeslot		0 <maxno ofDLts&gt;</maxno 			-	
Information 7.68Mcps		0.22.07				
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.35		-	
>>>>TFCI Presence	0		9.2.1.57		-	
>>>>DL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information 7.68Mcps		ofPDSCHs >				
>>>>PDSCH ID 7.68Mcps	М		9.2.3.43		-	
>>>>TDD	М		9.2.3.34		_	
Channelisation Code 7.68Mcps						
PDSCH Sets To Delete		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
		of				
		PDSCHSe ts>				
>PDSCH Set ID	M	13>	9.2.3.11		_	
PUSCH Sets To Add	141	0 <maxno< td=""><td>0.2.0.11</td><td></td><td>GLOBAL</td><td>reject</td></maxno<>	0.2.0.11		GLOBAL	reject
POSCH Sels TO Add		of			GLOBAL	reject
		PUSCHSe ts>				
>PUSCH Set ID	М		9.2.3.13		_	
>PUSCH To Add Information		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>UL Timeslot		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofULts>				
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift	М		9.2.3.7		_	
And Burst Type						
>>>TFCI Presence	М		9.2.1.57		_	
>>>UL Code Information		1 <maxno ofPUSCHs</maxno 				
>>>>PUSCH ID	M	>	9.2.3.12		_	
>>>>TDD	M		9.2.3.19		_	
Channelisation Code			3.2.3.13			
>PUSCH To Add		01		Mandatory for	YES	reject
Information LCR		57		1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	120	. 5,000

	T	1		1		
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD Physical	M		9.2.3.20		-	
Channel Offset						
>>UL Timeslot Information LCR		1 <maxno ofULtsLCR &gt;</maxno 			_	
>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble Shift LCR	М		9.2.3.7A		-	
>>>TFCI Presence	М		9.2.1.57		_	
>>>UL Code Information LCR		1 <maxno ofPUSCHs &gt;</maxno 			-	
>>>PUSCH ID	М		9.2.3.12		_	
>>>TDD Channelisation Code LCR	М		9.2.3.19a		-	
>>>>TDD UL DPCH Time Slot Format LCR	0		9.2.3.21C		YES	reject
>PUSCH To Add Information 7.68Mcps		01		Mandatory for 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD or 3.84 Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD Physical Channel Offset	М		9.2.3.20		-	
>>UL Timeslot		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information 7.68Mcps		ofULts>				
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift And Burst Type	М		9.2.3.35		-	
7.68Mcps						
>>>TFCI Presence	М		9.2.1.57		_	
>>>UL Code		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information 7.68Mcps		ofPUSCHs >				
>>>PUSCH ID	M		9.2.3.12		_	
>>>>TDD Channelisation Code 7.68Mcps	M		9.2.3.34		-	
PUSCH Sets To Modify		0 <maxno of PUSCHSe ts&gt;</maxno 			GLOBAL	reject
>PUSCH Set ID	М		9.2.3.13		_	
>CHOICE HCR or LCR or 7.68Mcps	М			See note 1 below	-	
>>3.84Mcps TDD					_	
>>>PUSCH To Modify		1			YES	reject
Information						
>>>Repetition	0		9.2.3.16		_	
Period						
>>>Repetition	0		9.2.3.15		_	
Length						
>>>>TDD Physical	0		9.2.3.20		_	
Channel Offset						

	1	0	1		
>>>UL Timeslot		0 <maxno ofULts&gt;</maxno 		_	
Information		OIOLIS>			
>>>>Time Slot	М		9.2.3.23	-	
>>>>Midamble	0		9.2.3.7	_	
Shift And Burst					
Type					
>>>>TFCI	0		9.2.1.57	_	
Presence					
>>>>UL Code		0 <maxno< td=""><td></td><td>_</td><td></td></maxno<>		_	
Information		ofPUSCHs			
Illiorniation		>			
>>>>PUSCH	М		9.2.3.12	-	
ID					
>>>>TDD	М		9.2.3.19	_	
Channelisation					
Code					
>>1.28Mcps TDD		1		YES	reject
>>>PUSCH To Modify		,		TES	reject
Information LCR			0.0.0.4.0		
>>>Repetition	0		9.2.3.16	_	
Period					
>>>Repetition	0		9.2.3.15	_	
Length					
>>>TDD Physical	0		9.2.3.20	_	
Channel Offset					
>>>UL Timeslot		0 <maxno< td=""><td></td><td>_</td><td></td></maxno<>		_	
Information LCR		ofULtsLCR			
illiorillation LCK		>			
>>>>Time Slot	М		9.2.3.24A	_	
LCR					
>>>>Midamble	0		9.2.3.7A	_	
Shift LCR					
>>>>TFCI	0		9.2.1.57	_	
			0.2.1.07		
Presence		0 <maxno< td=""><td></td><td></td><td></td></maxno<>			
>>>>UL Code		ofPUSCHs		_	
Information LCR		>			
>>>> DUSCH	М		9.2.3.12	_	
>>>>PUSCH ID			0.2.02		
	M		9.2.3.19a		
>>>>TDD	IVI		9.2.3.19a	_	
Channelisation					
Code LCR			00000	\	
>>>>TDD UL	0		9.2.3.21C	YES	reject
DPCH Time Slot					
Format LCR					
>>7.68Mcps TDD				 _	
>>>PUSCH To Modify		1		YES	reject
Information 7.68Mcps					
>>>Repetition	0		9.2.3.16	_	
Period					
	0		9.2.3.15	_	
>>>Repetition	~		3.2.3.13		
Length			0.0.0.00		
>>>>TDD Physical	0		9.2.3.20	_	
Channel Offset					
>>>>UL Timeslot		0 <maxno< td=""><td></td><td>_</td><td></td></maxno<>		_	
Information		ofULts>			
7.68Mcps				 	
>>>>Time Slot	М		9.2.3.23	_	

	- <b>1</b>	T	1	1	· · · · · · · · · · · · · · · · · · ·	
>>>>Midamble	0		9.2.3.35		_	
Shift And Burst						
Type 7.68Mcps						
>>>>TFCI	0		9.2.1.57		_	
Presence						
>>>>UL Code		0 <maxno< td=""><td></td><td></td><td></td><td></td></maxno<>				
		ofPUSCHs			_	
Information		>				
7.68Mcps						
>>>>PUSCH	M		9.2.3.12		_	
ID						
>>>>TDD	M		9.2.3.34		_	
Channelisation						
Code 7.68Mcps						
PUSCH Sets To Delete		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
1 00011 octs 10 belete		ofPUSCH				
		Sets>				
>PUSCH Set ID	M		9.2.3.13		_	
HS-PDSCH TDD		01			GLOBAL	reject
Information		1				,
>DL Timeslot and Code		0 <maxno< td=""><td></td><td>Mandatory for</td><td>_</td><td></td></maxno<>		Mandatory for	_	
		ofDLts>		3.84Mcps TDD.	_	
Information		0,020		Not Applicable		
				to 1.28Mcps		
				TDD or		
				7.68Mcps TDD.		
>>Time Slot	М		9.2.3.23	.,	_	
>>Midamble Shift And	М		9.2.3.7		_	
Burst Type	***		3.2.0			
		1 <maxno< td=""><td></td><td></td><td></td><td></td></maxno<>				
>>Codes		ofHSPDS			_	
		CHs>				
>>>TDD	М	00	9.2.3.19		_	
			5.2.5.15			
Channelisation Code	0			Maximum	YES	roicat
>>HS-PDSCH and HS-			Maximum	transmission	150	reject
SCCH Total Power			Transmissio	power to be		
			n Power	allowed for HS-		
			9.2.1.40	PDSCH and		
				HS-SCCH		
				codes in the		
				timeslot		
>DL Timeslot and Code		0		Mandatory for	EACH	reject
Information LCR per		<maxfreq< td=""><td></td><td>1.28Mcps TDD</td><td></td><td>•</td></maxfreq<>		1.28Mcps TDD		•
UARFCN		uencyinCe		Not Applicable		
UARFUN		<i>II&gt;</i>		to 3.84Mcps		
				TDD or		
				7.68Mcps TDD.		
				See note 2		
		_		below		
>>DL Timeslot and		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Code Information LCR		ofDLtsLCR				
T. 01.1105	N/A	>	0 2 2 24 4			
>>>Time Slot LCR	M		9.2.3.24A		_	
>>>Midamble Shift	M		9.2.3.7A		_	
LCR						
>>>Codes LCR		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
		ofHSPDS				
		CHs>				
>>>TDD	M		9.2.3.19		_	
Channelisation Code						

110 000011		1		Maximum	YES	roject
>>>HS-PDSCH and	0		Maximum	Maximum transmission	159	reject
HS-SCCH Total Power			Transmissio	power to be		
			n Power 9.2.1.40	allowed for HS-		
			9.2.1.40	PDSCH and		
				HS-SCCH		
				codes in the timeslot		
>>UARFCN	0		9.2.1.65	Corresponds to	_	
77 G/ II II G/ I				Nt [15]		
				Mandatory for		
				1.28Mcps TDD when using		
				multiple		
				frequencies.		
>DL Timeslot and Code		0 <maxno< td=""><td></td><td>Mandatory for</td><td>GLOBAL</td><td>reject</td></maxno<>		Mandatory for	GLOBAL	reject
Information 7.68Mcps		ofDLts>		7.68Mcps TDD.		
				Not Applicable to 1.28Mcps		
				TDD or 3.84		
				Mcps TDD.		
>>Time Slot	М		9.2.3.23		_	
>>Midamble Shift And	М		9.2.3.35		_	
Burst Type 7.68Mcps						
>>Codes 7.68Mcps		1 <maxno ofHSPDS</maxno 			_	
		CHs768>				
>>>TDD	М		9.2.3.34		_	
Channelisation Code						
7.68Mcps						
>>HS-PDSCH and HS-	0		Maximum	Maximum	_	_
SCCH Total Power			Transmissio	transmission		
			n Power	power to be allowed for HS-		
			9.2.1.40	PDSCH and		
				HS-SCCH		
				codes in the		
Add to HS-SCCH		01		timeslot	GLOBAL	reject
Resource Pool		0 1			GLOBAL	Тејест
>HS-SCCH Information		0 <maxno< td=""><td></td><td>Applicable to</td><td>_</td><td></td></maxno<>		Applicable to	_	
>H3-3CCH IIIIOIIIIation		ofHSSCC		3.84Mcps TDD		
		Hs>		only		
>>HS-SCCH ID	М		9.2.3.5Ga		_	
>>Time Slot	M		9.2.3.23		_	
>>Midamble Shift And	M		9.2.3.7		_	
Burst Type	M		9.2.3.19			
>>TDD Channelisation Code	IVI		3.4.3.19		_	
>>Maximum HS-SCCH	M		DL Power		_	
>>waximum H5-500H Power			9.2.1.21		_	
>>HS-SICH Information		1			_	
>>>HS-SICH ID	М		9.2.3.5Gb		_	
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift	М		9.2.3.7		_	
And Burst Type			9.2.3.19		_	
And Burst Type >>>TDD	М		0.2.00			
	М		0.2.00			
>>>TDD Channelisation Code >HS-SCCH Information	M	0 <maxno< td=""><td>0.2.00</td><td>Applicable to</td><td>_</td><td></td></maxno<>	0.2.00	Applicable to	_	
>>>TDD Channelisation Code	M	ofHSSCC	0.2.00	1.28Mcps TDD	_	
>>>TDD Channelisation Code >HS-SCCH Information	М		0.2.0.10		_	

>>HS-SCCH ID	M		9.2.3.5Ga	If the Extended HS-SCCH ID IE is included in the HS-SCCH Information LCR IE, the HS-SCCH ID IE shall be ignored.	-	
>>Time Slot LCR	M		9.2.3.24A		1	
>>Midamble Shift LCR	M		9.2.3.7A		_	
>>First TDD Channelisation Code	M		TDD Channelisat ion Code 9.2.3.19		1	
>>Second TDD Channelisation Code	M		TDD Channelisat ion Code 9.2.3.19		-	
>>Maximum HS-SCCH Power	М		DL Power 9.2.1.21		_	
>>HS-SICH Information LCR		1			_	
>>>HS-SICH ID	M		9.2.3.5Gb	If the Extended HS-SICH ID IE is included in the HS-SICH Information LCR IE, the HS-SICH ID IE shall be ignored.	I	
>>>Time Slot LCR	M		9.2.3.24A		_	
>>>Midamble Shift LCR	М		9.2.3.7A		_	
>>>TDD Channelisation Code	М		9.2.3.19		-	
>>>Extended HS-SICH ID	0		9.2.3.5K	The Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	YES	ignore
>>Extended HS-SCCH ID	0		9.2.3.5J	The Extended HS-SCCH ID IE shall be used if the HS-SCCH identity has a value larger than 31.	YES	ignore
>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Mandatory for 1.28Mcps TDD when using multiple frequencies.	YES-	ignore
>>HS-SICH Reference Signal Information	0		9.2.3.103		YES	ignore
>HS-SCCH Information 7.68Mcps		0 <maxno ofHSSCC Hs&gt;</maxno 		Applicable to 7.68Mcps TDD only	GLOBAL	reject
>>HS-SCCH ID	М		9.2.3.5Ga		_	

Time Of t	l M	T	0 2 2 22			
>>Time Slot	M		9.2.3.23		_	
>>Midamble Shift And	М		9.2.3.35		_	
Burst Type 7.68Mcps	N4		0.0004			
>>TDD Channelisation	M		9.2.3.34		_	
Code 7.68Mcps	N4		DI D			
>>Maximum HS-SCCH	М		DL Power 9.2.1.21		_	
Power			3.2.1.21			
>>HS-SICH Information		1			_	
7.68Mcps			0.00.501			
>>>HS-SICH ID	M		9.2.3.5Gb		_	
>>>Time Slot	M		9.2.3.23		_	
>>>Midamble Shift	M		9.2.3.35		_	
And Burst Type						
7.68Mcps			2224			
>>>TDD	М		9.2.3.34		_	
Channelisation Code						
7.68Mcps					01.0041	
Modify HS-SCCH		01			GLOBAL	reject
Resource Pool				A 1: 1.1 :		
>HS-SCCH Information		0 <maxno ofHSSCC Hs&gt;</maxno 		Applicable to 3.84Mcps TDD only	_	
>>HS-SCCH ID	М	1.05	9.2.3.5Ga	Siny .	_	
>>Time Slot	0		9.2.3.23		_	
>>Midamble Shift And	0		9.2.3.7		_	
Burst Type						
>>TDD Channelisation	0		9.2.3.19		_	
Code	_					
>>Maximum HS-SCCH	0		DL Power		_	
Power			9.2.1.21			
>>HS-SICH Information		01			_	
>>>HS-SICH ID	М		9.2.3.5Gb		_	
>>>Time Slot	0		9.2.3.23		_	
>>>Midamble Shift	0		9.2.3.7		_	
And Burst Type	_					
>>>TDD	0		9.2.3.19		_	
Channelisation Code						
>HS-SCCH Information		0 <maxno< td=""><td></td><td>Applicable to</td><td>_</td><td></td></maxno<>		Applicable to	_	
LCR		ofHSSCC Hs>		1.28Mcps TDD only See note 3 below		
>>HS-SCCH ID	M		9.2.3.5Ga	If the Extended HS-SCCH ID IE is included in the HS-SCCH Information LCR IE, the HS-SCCH ID IE shall be ignored.	-	
>>Time Slot LCR	0		9.2.3.24A		_	
>>Midamble Shift LCR	0		9.2.3.7A		_	
>>First TDD Channelisation Code	0		TDD Channelisat ion Code 9.2.3.19		-	
>>Second TDD Channelisation Code	0		TDD Channelisat ion Code 9.2.3.19		-	

		1	DI Davier			
>>Maximum HS-SCCH	0		DL Power 9.2.1.21		_	
Power		01	J.Z.1.Z1			
>>HS-SICH Information LCR		0 1			_	
>>>HS-SICH ID	М		9.2.3.5Gb	If the Extended HS-SICH ID IE is included in the HS-SICH Information LCR IE, the HS-SICH ID IE shall be ignored.	1	
>>>Time Slot LCR	0		9.2.3.24A		_	
>>Midamble Shift LCR	0		9.2.3.7A		_	
>>>TDD	0		9.2.3.19		_	
Channelisation Code						
>>>Extended HS-SICH	0		9.2.3.5K	The Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	YES	ignore
>>Extended HS-SCCH ID	0		9.2.3.5J	The Extended HS-SCCH ID IE shall be used if the HS-SCCH identity has a value larger than 31.	YES	ignore
>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable to 1.28Mcps TDD when using multiple frequencies.	YES	ignore
>>HS-SICH Reference Signal Information Modify		01			YES	reject
>>>HS-SICH Reference Signal Information	0		9.2.3.103		_	
>HS-SCCH Information 7.68Mcps		0 <maxno ofHSSCC Hs&gt;</maxno 		Applicable to 7.68Mcps TDD only	GLOBAL	reject
>>HS-SCCH ID	М		9.2.3.5Ga		-	
>>Time Slot	0		9.2.3.23		_	
>>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.35			
>>TDD Channelisation Code 7.68Mcps	М		9.2.3.34		-	
>>Maximum HS-SCCH Power	0		DL Power 9.2.1.21		_	
>>HS-SICH Information 7.68Mcps		01			_	
>>>HS-SICH ID	М		9.2.3.5Gb		-	
>>>Time Slot	0		9.2.3.23		_	
>>>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.35		-	

			00001	1		
>>>TDD Channelisation Code	M		9.2.3.34		_	
7.68Mcps  Delete from HS-SCCH  Resource Pool		0 <maxno of HSSCCHs</maxno 		For 1.28Mcps TDD ,see note 3 below	GLOBAL	reject
>HS-SCCH ID	M		9.2.3.5Ga	For 1.28Mcps TDD, if the Extended HS- SCCH ID IE is included in the Delete from HS-SCCH Resource Pool IE, the HS- SCCH ID IE shall be ignored	-	
>Extended HS-SCCH ID	0		9.2.3.5J	Applicable to 1.28Mcps TDD only, the Extended HS-SCCH ID IE shall be used if the HS-SCCH identity has a value larger than 31.	YES	ignore
Configuration Generation ID	0		9.2.1.16		YES	reject
E-PUCH Information		01		3.84Mcps TDD only	GLOBAL	reject
>LTGI Presence	M		9.2.3.58		_	
>SNPL Reporting Type	M		9.2.3.62		_	
>Midamble Shift And Burst Type	М		9.2.3.7		-	
>E-PUCH Timeslot Information		1 <maxno ofEPUCHs lots&gt;</maxno 			-	
>>Time Slot	M		9.2.3.23			
Add to E-AGCH Resource Pool		01		3.84Mcps TDD only	GLOBAL	reject
>E-AGCH Information		0 <maxno ofEAG CHs&gt;</maxno 			_	
>>E-AGCH ID TDD	M		9.2.3.51		_	
>>Time Slot	M		9.2.3.23		_	
>>Midamble Shift And Burst Type	М		9.2.3.7		_	
>>TDD Channelisation Code	М		9.2.3.19		_	
>>Maximum E-AGCH Power	М		DL Power 9.2.1.21		_	
Modify E-AGCH Resource Pool		01		3.84Mcps TDD only	GLOBAL	reject

T	1	,	1	1	· · · · · · · · · · · · · · · · · · ·	
>E-AGCH Information		0 <maxno< td=""><td></td><td></td><td>-</td><td></td></maxno<>			-	
		ofEAG				
>>E-AGCH ID TDD	M	CHs>	9.2.3.51		_	
>>Time Slot	O		9.2.3.31		_	
>>Midamble Shift And	0		9.2.3.7		_	
Burst Type					_	
>>TDD Channelisation Code	0		9.2.3.19		_	
>>Maximum E-AGCH Power	0		DL Power 9.2.1.21		-	
Delete from E-AGCH		0 <maxno< td=""><td>5.2.1.21</td><td></td><td>GLOBAL</td><td>reject</td></maxno<>	5.2.1.21		GLOBAL	reject
Resource Pool		ofEAG CHs>			0102/11	. 0,000
>E-AGCH ID TDD	М		9.2.3.51		_	
E-HICH Information		01		3.84Mcps TDD only	GLOBAL	reject
>Midamble Shift And Burst Type	М		9.2.3.7		-	
>TDD Channelisation	M		9.2.3.19		-	
Code >Maximum E-HICH Power	NA	1	DL Power			
>iviaxiiiiuiii E-HICH Power	M		9.2.1.21		_	
Maximum Generated	0	1	9.2.1.21	Applicable to	YES	reject
Received Total Wide Band Power in Other Cells			3.2.0.00	3.84Mcps and 7.68 Mcps TDD only	120	10,001
E-PUCH Information 7.68Mcps		01		7.68Mcps TDD only	GLOBAL	reject
>LTGI Presence	М		9.2.3.58	•	_	
>SNPL Reporting Type	M		9.2.3.62		_	
>Midamble Shift And Burst	M		9.2.3.35		_	
Type 7.68Mcps						
>E-PUCH Timeslot Information		1 <maxno ofEPUCHs lots&gt;</maxno 			-	
>>Time Slot	M	10132	9.2.3.23		_	
Add to E-AGCH Resource	101	01	0.2.0.20	7.68Mcps TDD	GLOBAL	reject
Pool 7.68Mcps				only	0205, (2	10,000
>E-AGCH Information		0 <maxno ofEAG CHs&gt;</maxno 		,	-	
>>E-AGCH ID TDD	М	01132	9.2.3.51		_	
>>Time Slot	M		9.2.3.23		_	
>>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.35		-	
>>TDD Channelisation Code 7.68Mcps	М		9.2.3.34		-	
>>Maximum E-AGCH	М		DL Power 9.2.1.21		_	
		01	७.८.।.८।	7.68Mcps TDD	GLOBAL	reject
Modify E-AGCH Resource Pool 7.68Mcps				only	GLODAL	reject
>E-AGCH Information		0 <maxno ofEAG CHs&gt;</maxno 			_	
>>E-AGCH ID TDD	М		9.2.3.51		_	
>>Time Slot	0		9.2.3.23		_	
>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.35		-	
>>TDD Channelisation Code 7.68Mcps	0		9.2.3.34		-	
>>Maximum E-AGCH Power	0		DL Power 9.2.1.21		-	
E-HICH Information		01		7.68Mcps TDD only	GLOBAL	reject
7.68Mcps	İ			Silly		

		T	1	1	, ,	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.35		_	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.34		_	
>Maximum E-HICH Power	М		DL Power 9.2.1.21		-	
E-PUCH Information 1.28Mcps		01	0.2.1.21	1.28Mcps TDD only	GLOBAL	reject
>LTGI Presence	M		9.2.3.58	Office	_	
>SNPL Reporting Type	M		9.2.3.62		_	
>E-PUCH Timeslot	IVI	0 <maxfr< td=""><td>9.2.3.02</td><td>See note 2</td><td>_</td><td></td></maxfr<>	9.2.3.02	See note 2	_	
information 1.28Mcps per UARFCN		equencyin Cell>		below		
>>E-PUCH Timeslot Information 1.28Mcps		0 <maxno ofEPUCHs lotsLCR&gt;</maxno 			-	
>>>Time Slot LCR	M		9.2.3.24A		_	
>>>Midamble Shift LCR	М		9.2.3.7A		_	
>>>Codes LCR		1 <maxno ofEPUCHc odes&gt;</maxno 			_	
>>>TDD Channelisation Code	М		9.2.3.19		_	
>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Mandatory for 1.28Mcps TDD when using multiple frequencies.	YES	ignore
Add to E-AGCH Resource Pool 1.28Mcps		01		1.28Mcps TDD only	GLOBAL	reject
>E-AGCH Information 1.28Mcps		1 <maxno ofEAG CHs&gt;</maxno 			-	
>>E-AGCH ID TDD	М	01102	9.2.3.51		_	
>>Time Slot LCR	M		9.2.3.24A		_	
>>Midamble Shift LCR	M		9.2.3.7A		_	
>>First TDD	M		TDD		_	
Channelisation Code	IVI		Channelisat ion Code 9.2.3.19		_	
>>Second TDD	М		TDD		_	
Channelisation Code			Channelisat ion Code 9.2.3.19			
>>Maximum E-AGCH Power	М		DL Power 9.2.1.21		-	
>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Mandatory for 1.28Mcps TDD when using multiple frequencies.	YES	ignore
Modify E-AGCH Resource Pool 1.28Mcps		01		1.28Mcps TDD only	GLOBAL	reject
>E-AGCH Information 1.28Mcps		1 <maxno ofEAG CHs&gt;</maxno 			-	
>>E-AGCH ID TDD	М		9.2.3.51		_	
		1		1	1	
>>Time Slot LCR	0		9.2.3.24A		_	

>>First TDD	0		TDD		_	
Channelisation Code			Channelisat			
			ion Code			
			9.2.3.19			
>>Second TDD	0		TDD			
Channelisation Code			Channelisat		_	
Chamilensation Code						
			ion Code			
<u></u>	<u> </u>		9.2.3.19			
>>Maximum E-AGCH	0		DL Power		_	
Power			9.2.1.21			
>>UARFCN	0		9.2.1.65	Corresponds to	YES	ignore
				Nt [15]		_
				Mandatory for		
				1.28Mcps TDD		
				when using		
				multiple		
				frequencies.		
Add to E-HICH Resource	-	0.1			GLOBAL	roiset
		01		1.28Mcps TDD	GLOBAL	reject
Pool 1.28Mcps		<del> </del>		only		
>E-HICH Information		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
1.28Mcps		ofEHICHs				
		>				
>>E-HICH ID TDD	M		9.2.3.51a	If the Extended	_	
				E-HICH ID TDD		
				IE is included in		
				the <i>E-HICH</i>		
				Information		
				1.28Mcps IE,		
				the E-HICH ID		
				TDD IE shall be		
E LUCUE		ļ	0.000	ignored.		
>>E-HICH Type	M		9.2.3.68		_	
>>TDD Channelisation	M		9.2.3.19			
Code	<u> </u>	<u> </u>				
>>Time Slot LCR	M		9.2.3.24A		_	
>>Midamble Shift LCR	M		9.2.3.7A		_	
>>Maximum E-HICH	M	1	DL Power		_	
Power	141		9.2.1.21			
		<del> </del>		Applicable 4-	VEC	ia
>>Extended E-HICH ID	0		9.2.3.51b	Applicable to	YES	ignore
TDD				1.28Mcps TDD		
				only, the		
				Extended E-		
				HICH ID TDD		
				IE shall be used		
				if the E-HICH		
				identity has a		
				value larger		
				than 31.		
>>UARFCN	0		9.2.1.65	Corresponds to	YES	ignore
- <del></del> -	_					3.12.10
				Nt[15]		
				Mandatory for		
				1.28Mcps TDD		
				when using		
				multiple		
				frequencies.		
Modify E-UICH Passures	+	01			GLOBAL	roject
Modify E-HICH Resource		01		1.28Mcps TDD	GLUDAL	reject
Pool 1.28Mcps				only		
>E-HICH Information		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
1.28Mcps		ofEHICHs				
	i contraction of the contraction	>	i	1	i	

1			_	T	1	
>>E-HICH ID TDD	M		9.2.3.51a	If the Extended E-HICH ID TDD IE is included in the E-HICH Information 1.28Mcps IE, the E-HICH ID TDD IE shall be	_	
E HIOLI Tomos			0.0.0.00	ignored.		
>>E-HICH Type	0		9.2.3.68		_	
>>TDD Channelisation Code	0		9.2.3.19		_	
>>Time Slot LCR	0		9.2.3.24A		_	
>>Midamble Shift LCR	0		9.2.3.7A		_	
>>Maximum E-HICH	0		DL Power		_	
Power			9.2.1.21			
>>Extended E-HICH ID TDD	0		9.2.3.51b	Applicable to 1.28Mcps TDD only, the Extended E- HICH ID TDD IE shall be used if the E-HICH identity has a value larger than 31.	YES	ignore
>>UARFCN	0		9.2.1.65	Corresponds to  Nt [15]  Mandatory for 1.28Mcps TDD  when using multiple frequencies.	YES	ignore
Delete from E-HICH Resource Pool 1.28Mcps		0 <maxno ofEHICHs &gt;</maxno 		1.28Mcps TDD only	GLOBAL	reject
>E-HICH ID TDD	M		9.2.3.51a	If the Extended E-HICH ID TDD IE is included in the Delete from E-HICH Resource Pool 1.28Mcps IE, the E-HICH ID TDD IE shall be ignored.	_	
>Extended E-HICH ID TDD	0		9.2.3.51b	Applicable to 1.28Mcps TDD only, the Extended E- HICH ID TDD IE shall be used if the E-HICH identity has a value larger than 31.	YES	ignore

	1		T	1	,	,
SYNC_UL Partition Information		01		Applicable to 1.28Mcps TDD to indicate the SYNC_UL partition information for the Primary Frequency. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
>E-RUCCH SYNC_UL codes bitmap	M		BITSTRING (8)	Each bit indicates availability of a SYNC_UL code, where the SYNC_UL codes are numbered "code 0" to "code 7". The value 1 of a bit indicates that the corresponding SYNC_UL code can be used. The value 0 of a bit indicates that the corresponding SYNC_UL code can be used. The value 0 of a bit indicates that the corresponding SYNC_UL code can not be used.		
Maximum Target Received Total Wide Band Power LCR	0		9.2.3.69	1.28Mcps TDD only	YES	reject
HS-DSCH Common System Information LCR	0		9.2.3.72	1.28Mcps TDD only	YES	reject
Common MAC Flows To Delete LCR	0		9.2.3.78	1.28Mcps TDD only	YES	reject
HS-DSCH Paging System Information LCR	0		9.2.3.73	1.28Mcps TDD only	YES	reject
Paging MAC Flows to Delete LCR	0		9.2.3.85	1.28Mcps TDD only	YES	reject
Common E-DCH System Information LCR	0		9.2.3.79	1.28Mcps TDD only	YES	reject
Common UL MAC Flows to Delete LCR	0		Common MAC Flows To Delete LCR 9.2.3.78	1.28Mcps TDD only	YES	reject
Common E-DCH MAC-d Flows to Delete LCR	0		9.2.3.86	1.28Mcps TDD only	YES	reject
Enhanced UE DRX Information LCR	0		9.2.3.82	1.28Mcps TDD only	YES	reject
Add to Non-HS-SCCH associated HS-SICH Resource Pool		01		1.28Mcps TDD only	GLOBAL	reject
>Non-HS-SCCH associated HS-SICH		0 <maxno ofNonHSA</maxno 		See note 4 below	1	
Information		HSSICH>				
>>Non-HS-SCCH associated HS-SICH ID	М		INTEGER (0255)		_	
>>Time Slot LCR	M		9.2.3.24A		_	
>>Midamble Shift LCR	M		9.2.3.7A		_	

>>TDD Channelisation Code	М		9.2.3.19		_	
>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Mandatory for 1.28Mcps TDD when using multiple frequencies.	-	
Modify Non-HS-SCCH associated HS-SICH Resource Pool		01		1.28Mcps TDD only	GLOBAL	reject
>Non-HS-SCCH associated HS-SICH Information		0 <maxno ofNonHSA HSSICH&gt;</maxno 		See note 4 below	-	
>>Non-HS-SCCH associated HS-SICH ID	М		INTEGER (0255)		_	
>>Time Slot LCR	0		9.2.3.24A		_	
>>Midamble Shift LCR	0		9.2.3.7A		_	
>>TDD Channelisation Code	0		9.2.3.19		_	
>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Mandatory for 1.28Mcps TDD when using multiple frequencies.	_	
Delete from Non-HS-SCCH associated HS-SICH Resource Pool		0 <maxno ofNonHSA HSSICH&gt;</maxno 		1.28Mcps TDD only See note 4 below	GLOBAL	reject
>Non-HS-SCCH associated HS-SICH ID	М		INTEGER (0255)		_	
Power Control GAP for CELL_FACH	0		INTEGER (1255)	Unit: Number of subframes.	YES	ignore
				Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.		
Out-of-sync Detection Window	0		ENUMERA TED (40, 80, 160, 320, 640, )	Unit: ms Applicable to 1.28Mcps TDD.	YES	reject
Treset Usage Indicator	0		NÚLL	Applicable to 1.28Mcps TDD only	YES	ignore

- Note 1: This information element is a simplified representation of the ASN.1. The choice is in reality performed through the use of ProtocolIE-Single-Container within the ASN.1.
- Note 2: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxFrequencyinCell are represented by separate ASN.1 structures with different criticalities.
- Note 3: This information element is a simplified representation of the ASN.1. Repetitions 1 to 32 and repetitions 33 to *maxnoofHSSCCHs* are represented by separate ASN.1 structures.
- Note 4: This information element is a simplified representation of the ASN.1. Repetitions 1 to 4 and repetitions 5 to *maxnoofNonHSAHSSICH* are represented by separate ASN.1 structures.

Range Bound	Explanation
maxnoofPDSCHSets	Maximum number of PDSCH Sets in a cell.
maxnoofPDSCHs	Maximum number of PDSCH in a cell.
maxnoofPUSCHSets	Maximum number of PUSCH Sets in a cell.
maxnoofPUSCHs	Maximum number of PUSCH in a cell.
maxnoofDLts	Maximum number of Downlink time slots in a cell for 3.84Mcps TDD.
maxnoofDLtsLCR	Maximum number of Downlink time slots in a cell for 1.28Mcps TDD.
maxnoofULts	Maximum number of Uplink time slots in a cell for 3.84Mcps TDD.
maxnoofULtsLCR	Maximum number of Uplink time slots in a cell for 1.28Mcps TDD
maxnoofHSSCCHs	Maximum number of HS-SCCHs in a Cell
maxnoofHSPDSCHs	Maximum number of HS-PDSCHs in one time slot of a Cell for 1.28Mcps
	TDD and 3.84Mcps TDD
maxnoofHSPDSCHs768	Maximum number of HS-PDSCHs in one time slot of a Cell for
	7.68Mcps TDD
maxnoofEAGCHs	Maximum number of E-AGCHs in a Cell
maxnoofEPUCHslots	Maximum number of E-PUCH time slots in a Cell for 3.84Mcps TDD and
	7.68Mcps TDD
maxnoofEHICHs	Maximum number of E-HICHs in a Cell
maxnoofEPUCHslotsLCR	Maximum number of E-PUCH time slots in a Carrier for 1.28Mcps TDD
maxnoofEPUCHcodes	Maximum number of E-PUCH codes in one time slot for 1.28Mcps TDD
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell
maxnoofNonHSAHSSICH	Maximum number of Non-HS-SCCH associated HS-SICH in a cell for
	1.28 Mcps TDD

#### 9.1.63 PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore
E-HICH Time Offset	0		9.2.3.59	Applicable to 3.84Mcps and 7.68 Mcps TDD only	YES	reject
E-HICH Time Offset LCR per UARFCN		0 < maxFrequ encyinCell >		1.28Mcps TDD only. See note 1 below	EACH	reject
>E-HICH Time Offset LCR	М		9.2.3.59a		_	
>UARFCN	0		9.2.1.65	Corresponds to Nt [15]. Mandatory for 1.28Mcps TDD when using multiple frequencies.	_	
HS-DSCH Common System Information Response	0		9.2.2.77	FDD only	YES	ignore
HS-DSCH Paging System Information Response	0		9.2.2.78	FDD only	YES	ignore
Common E-DCH System Information Response	0		9.2.2.104	FDD only	YES	Ignore
HS-DSCH Common System Information Response LCR	0		9.2.3.74	1.28Mcps TDD only	YES	ignore
HS-DSCH Paging System Information Response LCR	0		9.2.3.75	1.28Mcps TDD only	YES	ignore
Common E-DCH System Information Response LCR	0		9.2.3.80	1.28Mcps TDD only	YES	Ignore

Note 1 This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxFrequencyinCell are represented by separate ASN.1 structures with different criticalities.

Range Bound	Explanation
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

# 9.1.64 PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		-	
CHOICE Cause Level	М				YES	ignore
>General						
>>Cause	M		9.2.1.6		_	
>Set Specific				TDD Only		
>>Unsuccessful DL Shared Channel Set		0 <maxno ofPDSCH Sets&gt;</maxno 			EACH	ignore
>>>PDSCH Set ID	M		9.2.3.13		-	
>>>Cause	M		9.2.1.6		_	
>>Unsuccessful UL Shared Channel Set		0 <maxno ofPUSCH Sets&gt;</maxno 			EACH	ignore
>>>PUSCH Set ID	M		9.2.3.13		-	
>>>Cause	M		9.2.1.6		_	
>Extension Cause Level						
>>UARFCN Specific		1		Applicable to 1.28Mcps TDD only when using multiple frequencies	YES	ignore
>>>Unsuccessful UARFCN		0 <maxfreq uencyinCe II&gt;</maxfreq 			EACH	ignore
>>>>UARFCN	M		9.2.1.65	Corresponds to Nt [15] Used to indicate the carrier on which HSDPA or E-DCH related resources configuration failure occurs.	_	
>>>Cause	М		9.2.1.6		-	
>>>HS-Cause	0		9.2.1.6	Used to indicate the cause of HSDPA configuration. failure	YES	ignore
>>>E-Cause	0		9.2.1.6	Used to indicate the cause of E-DCH related configuration failure.	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
E-HICH Time Offset LCR per UARFCN		0 < maxFrequ encyinCell >		1.28Mcps TDD only	EACH	ignore
>E-HICH Time Offset LCR	М		9.2.3.59a			

>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Used to indicate the carrier on which HSDPA or E-DCH related resources configuration failure occurs.		
Common System Information Response LCR		01			YES	ignore
>HS-DSCH Common System Information Response LCR	М		9.2.3.74	1.28Mcps TDD only		
>HS-DSCH Paging System Information Response LCR	0		9.2.3.75	1.28Mcps TDD only		
>Common E-DCH System Information Response LCR	М		9.2.3.80	1.28Mcps TDD only		

Range Bound	Explanation
maxnoofPDSCHSets	Maximum number of PDSCH Sets in a cell
maxnoofPUSCHSets	Maximum number of PUSCH Sets in a cell
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

# 9.1.65 RESET REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	

CHOICE Reset Indicator	М				YES	ignore
>Communication Context						
>>Communication Context Information		1 <maxco mmunicati onContext &gt;</maxco 			EACH	reject
>>>CHOICE Communication Context Type	M				_	
>>>>CRNC Communication Context						
>>>>CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	-	
>>>Node B Communication Context						
>>>>Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	-	
>Communication Control Port						
>>Communication Control Port Information		1 <maxc CPinNode B&gt;</maxc 			EACH	reject
>>>Communication Control Port ID	М		9.2.1.15		-	
>Node B			NULL			

Range Bound	Explanation
maxCommunicationContext	Maximum number of Communication Contexts that can exist in the Node
	В
maxCCPinNode B	Maximum number of Communication Control Ports that can exist in the
	Node B

# 9.1.66 RESET RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.67 DL POWER TIMESLOT CONTROL REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
DL Time Slot ISCP Info	0		9.2.3.4F	Mandatory for 3.84Mcps TDD and 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	ignore
DL Time Slot ISCP Info LCR	0		9.2.3.4P	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD and 7.68Mcps TDD.	YES	ignore
Primary CCPCH RSCP	0		9.2.3.11A		YES	ignore
Primary CCPCH RSCP Delta	0		9.2.3.11B		YES	ignore

# 9.1.68 RADIO LINK PREEMPTION REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
RL Information		0 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	M		9.2.1.53		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of radio links for one UE

## 9.1.69 INFORMATION EXCHANGE INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	•
Information Exchange ID	M		9.2.1.36C		YES	reject
CHOICE Information Exchange Object Type	М				YES	reject
>Cell						
>>C-ID	M		9.2.1.9		_	
Information Type	M		9.2.1.36D		YES	reject
Information Report Characteristics	М		9.2.1.36B		YES	reject

# 9.1.70 INFORMATION EXCHANGE INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	. 0,000
Information Exchange ID	М		9.2.1.36C		YES	ignore
CHOICE Information Exchange Object Type	0				YES	ignore
>Cell						
>>Requested Data Value	M		9.2.1.51A		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.71 INFORMATION EXCHANGE INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Information Exchange ID	M		9.2.1.36C		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.72 INFORMATION REPORT

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE Information	M				YES	ignore
Exchange Object Type						
>Cell						
>>Requested Data Value Information	M		9.2.1.51B		1	

# 9.1.73 INFORMATION EXCHANGE TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Information Exchange ID	М		9.2.1.36C		YES	ignore

# 9.1.74 INFORMATION EXCHANGE FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Information Exchange ID	M		9.2.1.36C		YES	ignore
Cause	M		9.2.1.6		YES	ignore

# 9.1.75 CELL SYNCHRONISATION INITIATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Cell Sync Burst Repetition	М		9.2.3.4J		YES	reject
Period						_
Time Slot Information		015		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	GLOBAL	reject
>Time Slot	M		9.2.3.23		_	
Cell Sync Burst Transmission Initiation Information		01		Applicable to 3.84Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	М		9.2.3.4N		_	
>SFN	М		9.2.1.53A		_	
>Cell Sync Burst Code	М		9.2.3.4G		_	
>Cell Sync Burst Code Shift	М		9.2.3.4H		_	
>Initial DL Transmission	М		DL Power		_	
Power			9.2.1.21			
Cell Sync Burst Measurement Initiation Information		01		Applicable to 3.84Mcps TDD only	GLOBAL	reject
>CSB Measurement ID	M		9.2.3.41		_	
>Cell Sync Burst Code	М		9.2.3.4G		_	
>Cell Sync Burst Code Shift	M		9.2.3.4H		_	
>Synchronisation Report Type	M		9.2.3.18E		_	
>SFN	0		9.2.1.53A		_	
>Synchronisation Report Characteristics	М		9.2.3.18D		_	
SYNC_DL Code Transmission Initiation Information LCR		01		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	М		9.2.3.4N		_	
>SFN	М		9.2.1.53A		_	
>UARFCN	М		9.2.1.65		_	
>SYNC_DL Code ID	М		9.2.3.18B		_	
>DwPCH Power	М		9.2.3.5B		_	
SYNC_DL Code Measurement Initiation Information LCR		01		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Measurement ID	М		9.2.3.41		_	

>SFN	0	9.2.1.53A	_	
>UARFCN	M	9.2.1.65	_	
>SYNC_DL Code ID	M	9.2.3.18B	_	
>Synchronisation Report	M	9.2.3.18E	_	
Туре				
>Synchronisation Report	М	9.2.3.18D	_	
Characteristics				

# 9.1.76 CELL SYNCHRONISATION INITIATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.77 CELL SYNCHRONISATION INITIATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.78 CELL SYNCHRONISATION RECONFIGURATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Time Slot	M		9.2.3.23	Applicable to 3.84Mcps TDD only. For 1.28Mcps TDD, the CRNC should set this to 0 and the Node B shall ignore it	YES	reject
Number Of Cycles Per SFN Period	M		9.2.3.7B		YES	reject
Number Of Repetitions Per Cycle Period	M		9.2.3.7C		YES	reject
Cell Sync Burst Transmission Reconfiguration Information		0 <maxno ofCellSync Bursts&gt;</maxno 		Applicable to 3.84Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	М		9.2.3.4N		_	
>Sync Frame Number To Transmit	М		Sync Frame Number 9.2.3.18C		_	
>Cell Sync Burst Code	0		9.2.3.4G		_	
>Cell Sync Burst Code Shift	0		9.2.3.4H		_	
>DL Transmission Power	0		DL Power 9.2.1.21		_	
Cell Sync Burst Measurement Reconfiguration Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>Cell Sync Burst Measurement Information		1 <maxno ofCellSync Bursts&gt;</maxno 			GLOBAL	reject
>>Sync Frame Number To Receive	M		Sync Frame Number 9.2.3.18C		-	
>>Cell Sync Burst Information		1 <maxno ofreceptio nsperSync Frame&gt;</maxno 			_	
>>>CSB Measurement ID	M		9.2.3.41		_	
>>>Cell Sync Burst Code	М		9.2.3.4G		_	
>>>Cell Sync Burst Code Shift	М		9.2.3.4H		_	
>Synchronisation Report Type	0		9.2.3.18E		YES	reject
>Synchronisation Report Characteristics	0		9.2.3.18D		YES	reject
Number Of Subcycles Per Cycle Period	0		9.2.3.7D	Applicable to 1.28Mcps TDD only	YES	reject

SYNC_DL Code Transmission Reconfiguration Information LCR		0 <maxno ofSyncFra mesLCR&gt;</maxno 		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	M		9.2.3.4N		_	
>Sync Frame Number For Transmission	М		Sync Frame Number 9.2.3.18C		_	
>UARFCN	M		9.2.1.65		_	
>SYNC_DL Code ID	0		9.2.3.18B		_	
>DwPCH Power	0		9.2.3.5B		_	
SYNC_DL Code Measurement Reconfiguration Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>SYNC_DL Code Measurement Information LCR		1 <maxno ofSyncDL CodesLCR &gt;</maxno 			_	
>>Sync Frame Number To Receive	М		Sync Frame Number 9.2.3.18C		-	
>>Sync_DLCode Information LCR		1 <maxno ofreceptio nsperSync FrameLCR</maxno 			_	
>>>CSB Measurement	М		9.2.3.41		-	
>>>SYNC_DL Code ID	M		9.2.3.18B		_	
>>>UARFCN	M		9.2.1.65			
>>>Propagation Delay Compensation	0		Timing Adjustment Value LCR 9.2.3.22b		-	
>Synchronisation Report Type	0		9.2.3.18E		YES	reject
>Synchronisation Report Characteristics	0		9.2.3.18D		YES	reject

Range Bound	Explanation
maxnoofCellSyncBursts	Maximum number of cell synchronisation bursts per cycle for 3.84Mcps
	TDD
maxnoofreceptionsperSyncFrame	Maximum number of cell synchronisation burst receptions per Sync
	Frame for 3.84Mcps TDD
maxnoofSyncFramesLCR	Maximum number of Sync Frames per subcycle for 1.28Mcps TDD
maxnoofreceptionsperSyncFrameLCR	Maximum number of SYNC_DL Code ID receptions per Sync Frame for
	1.28Mcps TDD
maxnoofSyncDLCodesLCR	Maximum number of SYNC_DL Codes for 1.28Mcps TDD

# 9.1.79 CELL SYNCHRONISATION RECONFIGURATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.80 CELL SYNCHRONISATION RECONFIGURATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.81 CELL SYNCHRONISATION REPORT [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Cell Synchronisation Information		1 <maxce IlinNode B&gt;</maxce 			GLOBAL	ignore
>C-ID	M		9.2.1.9		YES	ignore
>CHOICE Synchronisation Report Type	0				YES	ignore
>>Initial Phase or Steady- State Phase						
>>>Cell Sync Burst Measured Information		0 <maxno ofCellSync Bursts&gt;</maxno 		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	_	
>>>SFN	M		9.2.1.53A		_	
>>>>Cell Sync Burst Information		1 <maxno ofreceptio nsperSync Frame&gt;</maxno 			_	
>>>>CHOICE Cell Sync Burst Availability Indicator >>>>> Cell Sync	M				-	
Burst Available						
>>>>Cell Sync Burst Timing	M		9.2.3.4L		_	
>>>>>Cell Sync Burst SIR	М		9.2.3.4K		_	
>>>> Cell Sync Burst Not Available			NULL			

>>>Accumulated Clock Update	0		Timing Adjustment Value 9.2.3.22a		YES	ignore
>>>SYNC_DL Codes Measured Information		0 <maxno ofSyncFra mesLCR&gt;</maxno 		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>>SFN	M		9.2.1.53A		_	
>>>SYNC_DL Code Information		1 <maxno ofreceptio nsperSync FrameLCR &gt;</maxno 			-	
>>>>CHOICE SYNC_DL Code Availability Indicator	M				-	
>>>>SYNC_DL Code Available						
>>>>SYNC_ DL Code ID Timing	M		Cell Sync Burst Timing LCR 9.2.3.4La		-	
>>>>SYNC_ DL Code ID SIR	M		Cell Sync Burst SIR 9.2.3.4K		-	
>>>>SYNC_DL Code Not Available			NULL			
>>Late-Entrant Cell			NULL			
>>Frequency Acquisition			NULL			

Range Bound	Explanation
maxCellinNode B	Maximum number of Cells in a Node B
maxnoofCellSyncBursts	Maximum number of cell synchronisation bursts per cycle for 3.84Mcps TDD
maxnoofreceptionsperSyncFrame	Maximum number of cell synchronisation burst receptions per Sync Frame for 3.84Mcps TDD
maxnoofSyncFramesLCR	Maximum number of SYNC Frames per measurement reporting period for 1.28Mcps TDD
maxnoofreceptionsperSyncFrameLCR	Maximum number of SYNC_DL Code ID receptions per Sync Frame for 1.28Mcps TDD

# 9.1.82 CELL SYNCHRONISATION TERMINATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	0		9.2.3.4N		YES	ignore
CSB Measurement ID	0		9.2.3.41		YES	ignore

# 9.1.83 CELL SYNCHRONISATION FAILURE INDICATION [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	0		9.2.3.4N		YES	ignore
CSB Measurement ID	0		9.2.3.41		YES	ignore
Cause	М		9.2.1.6		YES	ignore

# 9.1.84 CELL SYNCHRONISATION ADJUSTMENT REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		-	
Cell Adjustment Information		1 <maxce IlinNode B&gt;</maxce 			EACH	ignore
>C-ID	М		9.2.1.9		-	
>Frame Adjustment Value	0		9.2.3.5C		_	
>Timing Adjustment Value	0		9.2.3.22a	Applicable to 3.84Mcps TDD only	_	
>DL Transmission Power	0		9.2.1.21	Applicable to 3.84Mcps TDD only	_	
>SFN	0		9.2.1.53A	•	_	
>DwPCH Power	0		9.2.3.5B	Applicable to 1.28Mcps TDD only	YES	ignore
>Timing Adjustment Value LCR	0		9.2.3.22b	Applicable to 1.28Mcps TDD only	YES	ignore

Range Bound	Explanation			
maxCellinNode B	Maximum number of Cells in a Node B			

# 9.1.85 CELL SYNCHRONISATION ADJUSTMENT RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.86 CELL SYNCHRONISATION ADJUSTMENT FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CHOICE Cause Level	M				YES	ignore
>General						
>>Cause	M		9.2.1.6		_	
>Cell Specific						
>>Unsuccessful Cell Information Response		1 <maxce IlinNode B&gt;</maxce 			EACH	ignore
>>>C-ID	M		9.2.1.9		_	
>>>Cause	M		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation
maxCellinNode B	Maximum number of Cells in a Node B

# 9.1.87 BEARER REARRANGEMENT INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	ignore
DCHs To Re-arrange		0 <maxno ofDCHs&gt;</maxno 			GLOBAL	ignore
>DCH ID	M		9.2.1.20		_	
DSCHs To Re-arrange		0 <maxno ofDSCHs&gt;</maxno 		TDD only	GLOBAL	ignore
>DSCH ID	M		9.2.3.5a		_	
USCHs To Re-arrange		0 <maxno ofUSCHs&gt;</maxno 		TDD only	GLOBAL	ignore
>USCH ID	M		9.2.3.27		_	
HS-DSCHs MAC-d Flow To Re-arrange		0 <maxno ofMACdFl ows&gt;</maxno 			GLOBAL	ignore
>HS-DSCH MAC-d Flow ID	M		9.2.1.311		_	
E-DCHs MAC-d Flow To Rearrange		0 <maxno ofEDCHM ACdFlows &gt;</maxno 			GLOBAL	ignore
>E-DCH MAC-d Flow ID	M		9.2.1.29ad		_	

Range bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofDSCHs	Maximum number of DSCHs for a UE
maxnoofUSCHs	Maximum number of USCHs for a UE
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

# 9.1.88 RADIO LINK ACTIVATION COMMAND

# 9.1.88.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48		YES	ignore
Delayed Activation Information		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>Delayed Activation Update	М		9.2.1.24D		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE

# 9.1.88.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48		YES	ignore
Delayed Activation Information		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>Delayed Activation Update	М		9.2.1.24D		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE

# 9.1.89 RADIO LINK PARAMETER UPDATE INDICATION

# 9.1.89.1 FDD Message

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
HS-DSCH FDD Update Information	0		9.2.2.18Ea		YES	ignore
E-DCH FDD Update Information	0		9.2.2.13DA		YES	ignore
Additional HS Cell Information RL Param Upd		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
>HS-DSCH FDD Secondary Serving Update Information	М		9.2.2.18Eaa		_	

Range Bound	Explanation
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.89.2 TDD Message

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
HS-DSCH TDD Update Information	0		9.2.3.5GA		YES	ignore

#### 9.1.90 MBMS NOTIFICATION UPDATE COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	ignore
Common Physical Channel ID	М		9.2.1.13		YES	ignore
Modification Period	0		9.2.1.47a	This IE shall be present in the very first message	YES	ignore
MICH CFN	M		9.2.1.46a		YES	ignore
NI Information		1 <maxno ofNIs&gt;</maxno 			GLOBAL	ignore
>NI	M		9.2.1.47F		_	

Range Bound	Explanation
maxNoofNIs	Maximum number of NIs

#### 9.1.91 UE STATUS UPDATE COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Cell E-RNTI Status Information		1 <maxce IlinNode B&gt;</maxce 			EACH	ignore
>C-ID	M		9.2.1.9		_	
> Vacant E-RNTI		1 <maxer ntiToRelea se &gt;</maxer 			EACH	ignore
>>E-RNTI	M		9.2.1.75			

Range Bound	Explanation
maxCellinNode B	Maximum number of Cells in a Node B
maxErntiToRelease	Maximum number of E-RNTI to release per cell

# 9.2 Information Element Functional Definition and Contents

#### 9.2.0 General

Subclause 9.2 presents the NBAP IE definitions in tabular format. The corresponding ASN.1 definition is presented in Subclause 9.3. In case there is a contradiction between the tabular format in Subclause 9.2 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

When specifying information elements which are to be represented by bitstrings, if not otherwise specifically stated in the semantics description of the concerned IE or elsewhere, the following principle applies with regards to the ordering of bits:

- The first bit (leftmost bit) contains the most significant bit (MSB);
- The last bit (rightmost bit) contains the least significant bit (LSB);
- When importing bitstrings from other specifications, the first bit of the bitstring contains the first bit of the concerned information;

### 9.2.1 Common parameters

#### 9.2.1.1 Add/Delete Indicator

The add/delete indicator shall notify the CRNC whether the associated resource has been added to or removed from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Add/Delete Indicator			ENUMERATED (	
			Add,	
			Delete)	

#### 9.2.1.1A Allocation/Retention Priority

This parameter indicates the priority level in the allocation and retention of Node B internal resources. See Annex A.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Level	M		INTEGER (015)	This IE indicates the priority of the request.  Usage: Value "0" means "Spare"; It shall be treated as a logical error if received. Values between "1" and "14" are ordered in decreasing order of priority, "1" being the highest and "14" the lowest. Value "15" means "No Priority".
Pre-emption Capability	M		ENUMERATED ( shall not trigger pre- emption, may trigger pre- emption)	
Pre-emption Vulnerability	M		ENUMERATED ( not pre-emtable, pre-emptable)	

#### 9.2.1.1B Alternative Format Reporting Indicator

This IE indicates if Node B may report a measurement using an alternative format.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Alternative Format Reporting			ENUMERATED	
Indicator			(Alternative format is	
			allowed,)	

#### 9.2.1.2 Availability Status

The availability status is used to indicate more detailed information of the availability of the resource. In accordance with ref. [3], following values are defined. If the value of this IE is "empty", this implies that none of the status conditions described in ref. [3] are present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Availability Status			ENUMERATED ( empty, in test, failed, power off, off line, off duty, dependency, degraded, not installed, log full,)	

#### 9.2.1.3 BCCH Modification Time

Indicates the time after which the new system information shall be applied on BCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
BCCH Modification Time			INTEGER (0511)	All SFN values in which MIB may be mapped are allowed. The tabular description is presented in [18].

#### 9.2.1.4 Binding ID

The Binding ID is the identifier of a user data stream.

In case of transport bearer establishment with ALCAP [2][31], this IE contains the identifier that is allocated at the Node B and that is unique for each transport bearer under establishment to/from the Node B.

If the Transport Layer Address contains an IP address [29], this IE contains the UDP port [30] intended to be used for the user plane transport.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Binding ID			OCTET STRING (14,)	If the Binding ID includes an UDP port, the UDP port is included in octets 1 and 2. The first octet of the UDP port field shall be included in the first octet of the Binding ID.

#### 9.2.1.4A BLER

Void.

#### 9.2.1.5 Blocking Priority Indicator

The Blocking priority indicator shall indicate the immediacy with which a resource should be blocked from use. The following priority classes shall be supported in the Blocking priority indicator.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Blocking Priority Indicator			ENUMERATED (	"High" priority: Block resource
			High,	immediately.
			Normal,	"Normal" priority: Block
			Low,	resource when idle or upon
			)	timer expiry.
				"Low" priority: Block resource
				when idle.

#### 9.2.1.5A Burst Mode Parameters

The Burst Mode Parameters IE provides information to be applied for IPDL burst mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Burst Start	M		INTEGER (015)	See [10] and [21]
Burst Length	M		INTEGER (1025)	See [10] and [21]
Burst Freq	M		INTEGER (116)	See [10] and [21]

#### 9.2.1.5B Broadcast Common Transport Bearer Indication

The *Broadcast Common Transport Bearer Indication* IE is used by the Node B to inform the CRNC that the transport bearer of the existing Common Transport Channel which is indicated by the *Common Transport Channel ID* IE and *C-ID* IE, shall be used instead of establishing a new transport bearer. If there are more than one Common Transport Channels sharing the same transport bearer, Node B may include any one of these Common Transport Channels together with its corresponding C-ID in *Broadcast Common Transport Bearer Indication* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	М		9.2.1.14	
C-ID	М		9.2.1.9	

#### 9.2.1.5C Broadcast Reference

The *Broadcast Reference* IE is a unique identifier within the CRNC identifying the intended usage of a requested Common Transport Channel (e.g. the *Broadcast Reference* IE may identify a particular MBMS session).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Broadcast Reference			BIT STRING (SIZE(24))	

## 9.2.1.6 Cause

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Cause Group	М			
>Radio Network Layer				
>>Radio Network Layer	M		ENUMERATED (	
Cause			unknown C-ID,	
			Cell not available,	
			Power level not supported,	
			DL radio resources not available,	
			UL radio resources not available,	
			RL Already Activated/allocated, Node B Resources Unavailable,	
			Measurement not supported for	
			the object,	
			Combining Resources not	
			available,	
			Requested configuration not	
			supported,	
			Synchronization failure,	
			Priority transport channel	
			established, SIB Origination in Node B not	
			Supported,	
	1		Requested Tx Diversity Mode not	
	1		supported,	
			Unspecified,	
			BCCH scheduling error,	
			Measurement Temporarily not	
			Available,	
			Invalid CM Setting,	
			Reconfiguration CFN not elapsed,	
			Number of DL codes not	
			supported, S-CPICH not supported,	
			Combining not supported,	
			UL SF not supported,	
			DL SF not supported,	
			Common Transport Channel Type	
			not supported,	
			Dedicated Transport Channel	
			Type not supported,	
	1		Downlink Shared Channel Type	
	1		not supported, Uplink Shared Channel Type not	
			supported,	
			CM not supported,	
	1		Tx diversity no longer supported,	
	1		Unknown Local Cell ID,	
	1		,	
	1		Number of UL codes not	
	1		supported,	
	1		Information temporarily not available.	
	1		Information Provision not	
	1		supported for the object,	
	1		Cell Synchronisation not	
	1		supported,	
	1		Cell Synchronisation Adjustment	
	1		not supported,	
	1		DPC Mode Change not Supported,	
	1		IPDL already activated,	
	1		IPDL not supported,	
	1		IPDL parameters not available,	
			Frequency Acquisition not supported,	
			Power Balancing status not	
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		compatible, Requested type of Bearer Re- arrangement not supported, Signalling Bearer Re-arrangement not supported, Bearer Re-arrangement needed, Delayed Activation not Supported, RL Timing Adjustment not supported, MICH not supported, F-DPCH Not Supported, Modification Period not available, PLCCH not supported, Continuous Packet Connectivity DTX-DRX operation not available, Continuous Packet Connectivity UE DTX Cycle not available, MIMO not available, E-DCH MAC-d PDU Size Format not available, Multi Cell operation not available) Semi-Persistent scheduling not supported, Continuous Packet Connectivity DRX not supported, Continuous Packet Connectivity DRX not supported, Continuous Packet Connectivity DRX not available, SixtyfourQAM DL and MIMO Combined not available, S-CPICH power offset support not available, TX diversity for MIMO UE on DL Control Channels not available, Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available)	
>Transport Layer		,	
>>Transport Layer Cause	М	ENUMERATED ( Transport resource unavailable, Unspecified,)	
>Protocol			
>>Protocol Cause	М	ENUMERATED ( Transfer syntax error, Abstract syntax error (reject), Abstract syntax error (ignore and notify), Message not compatible with receiver state, Semantic error, Unspecified, Abstract syntax error (falsely constructed message),)	
>Misc		ENUMERATES (	
>>Miscellaneous Cause	M	ENUMERATED ( Control processing overload Hardware failure, O&M intervention, Not enough user plane processing resources, Unspecified,)	

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the concerned capability is missing. On the other hand, "not available" cause values indicate that the concerned capability is present, but insufficient resources were available to perform the requested action.

Radio Network Layer cause	Meaning
BCCH scheduling error	The Node B has detected an illegal BCCH schedule update (see
	subclause 8.2.16.3).
Bearer Re-arrangement needed	The Node B cannot perform the requested Radio Link Reconfiguration
	without bearer re-arrangement.
Cell not Available	The concerned cell or local cell is not available.
Cell Synchronisation not supported	The concerned cell(s) do not support Cell Synchronisation.
Cell Specific Tx Diversity Handling	Cell specific tx diversity handling for multi cell operation not available
For Multi Cell Operation Not	in the concerned cell(s)
Available	
Combining not supported	The Node B does not support RL combining for the concerned cells.
Combining Resources Not Available	The value of the received <i>Diversity Control Field</i> IE was set to "Must",
	but the Node B cannot perform the requested combining.
CM not supported	The concerned cell(s) do not support Compressed Mode.
Common Transport Channel Type not	The concerned cell(s) do not support the RACH and/or FACH Common
supported	Transport Channel Type.
Continuous Packet Connectivity	CPC resources for DTX-DRX operation not available in the concerned
DTX-DRX operation not available	cell(s).
Continuous Packet Connectivity UE	CPC resources for the UE DTX Cycle not available in the concerned
DTX Cycle not available	cell(s).
Dedicated Transport Channel Type not	The concerned cell(s) do not support the Dedicated Transport Channel
supported	Type.
Delayed Activation not Supported	The concerned cell(s) do not support delayed activation of RLs.  The Node B does not have sufficient DL radio resources available.
DL Radio Resources not Available	
DL SF not supported	The concerned cell(s) do not support the requested DL SF.
DL Shared Channel Type not	The concerned cell(s) do not support the Downlink Shared Channel
supported DPC Mode Change not Supported	Type. The concerned cells do not support DPC mode changes.
E-DCH MAC-d PDU Size Format	The selected E-DCH MAC-d PDU Size Format is not available in the
not available	concerned cell(s).
Frequency Acquisition not supported	The concerned cell(s) do not support Frequency Acquisition.
F-DPCH not supported	The concerned cell(s) do not support the Fractional DPCH
Information Provision not supported	The requested information provision is not supported for the concerned
for the object	object types.
Information temporarily not available	The requested information can temporarily not be provided.
Invalid CM Settings	The concerned cell(s) consider the requested Compressed Mode settings
invalid em seungs	invalid.
IPDL already activated	The concerned cell(s) have already active IPDL ongoing.
IPDL not supported	The concerned cell(s) do not support the IPDL.
IPDL parameters not available	The concerned cell(s) do not have IPDL parameters defining IPDL to be
1	applied.
Measurement not Supported For The	At least one of the concerned cell(s) does not support the requested
Object	measurement on the concerned object type.
Measurement Temporarily not	The Node B can temporarily not provide the requested measurement
Available	value.
MICH not supported	The concerned cell does not support MICH.
MIMO not available	MIMO resources not available in the concerned cell(s).
Modificaton Period not available	The Node B does not have modification period available.
Multi Cell operation not available	Multi Cell operation resources not available in the concerned cell(s)
Node B resources unavailable	The Node B does not have sufficient resources available.
Number of DL codes not supported	The concerned cell(s) do not support the requested number of DL codes.
Number of UL codes not supported	The concerned cell(s) do not support the requested number of UL codes.
Power Level not Supported	A DL power level was requested which the concerned cell(s) do not
	support.
Power Balancing status not compatible	The power balancing status in the SRNC is not compatible with that of
	the Node B.
PLCCH not supported	The concerned cell does not support PLCCH.
Priority transport channel established	The CRNC cannot perform the requested blocking since a transport
DV TILL A 11	channel with a high priority is present.
RL Timing Adjustment not Supported	The concerned cell(s) do not support adjustments of the RL timing.

Reconfiguration CFN not elapsed	The requested action cannot be performed due to that a RADIO LINK RECONFIGURATION COMMIT message was received previously, but the concerned CFN has not yet elapsed.
Requested Configuration not Supported	The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters.
Requested Type of Bearer Rearrangement not supported	The Node B does not support the requested type of bearer rearrangement.
Requested Tx Diversity mode not supported	The concerned cell(s) do not support the requested transmit diversity mode.
RL already Activated/ allocated	The Node B has already allocated an RL with the requested RL-id for this UE context.
S-CPICH not supported	The concerned cell(s) do not support S-CPICH.
S-CPICH power offset support not available	The support for setting up the desired power offset on S-CPICH with respect to P-CPICH is not available
SIB Orgination in Node B not Supported	The Node B does not support the origination of the requested SIB for the concerned cell.
Signalling Bearer Re-arrangement not supported	The Node B does not support the Signalling bearer re-arrangement.
SixtyfourQAM DL and MIMO Combined not available	SixtyfourQAM DL and MIMO Combined not available in the concerned cell(s).
Synchronisation Failure	Loss of UL Uu synchronisation.
Cell Synchronisation Adjustment not supported	The concerned cell(s) do not support Cell Synchronisation Adjustment.
TX diversity for MIMO UE on DL	The Node B does not have sufficient radio resources available to support
Control Channels not available	transmit diversity on downlink control channels when the UE is
	configured in MIMO mode with P-CPICH & S-CPICH as phase references [7]
Tx diversity no longer supported	Tx diversity can no longer be supported in the concerned cell.
UL Radio Resources not Available	The Node B does not have sufficient UL radio resources available.
UL SF not supported	The concerned cell(s) do not support the requested minimum UL SF.
UL Shared Channel Type not supported	The concerned cell(s) do not support the Uplink Shared Channel Type.
Unknown C-ID	The Node B is not aware of a cell with the provided C-ID.
Unknown Local Cell ID	The Node B is not aware of a local cell with the provided Local Cell ID
Unspecified	Sent when none of the above cause values applies but still the cause is Radio Network layer related.
Semi-Persistent scheduling not	The concerned cell(s) do not support the Semi-Persistent scheduling
supported	operation (for 1.28Mcps TDD only)
Continuous Packet Connectivity DRX	The concerned cell(s) do not support the Continuous Packet
not supported	Connectivity DRX operation (for 1.28Mcps TDD only)
Continuous Packet Connectivity DRX not available	HSPA resources for DRX operation not available in the concerned cell(s). (for 1.28Mcps TDD only)

Transport Network Layer cause	Meaning
Transport resource unavailable	The required transport resources are not available.
Unspecified	Sent when none of the above cause values applies but still the cause is
	Transport Network layer related.

Protocol cause	Meaning
Abstract Syntax Error (Reject)	The received message included an abstract syntax error and the
	concerned criticality indicated "reject" (see subclause 10.3).
Abstract Syntax Error (Ignore and	The received message included an abstract syntax error and the
Notify)	concerned criticality indicated "ignore and notify" (see subclause 10.3).
Abstract syntax error (falsely	The received message contained IEs in wrong order or with too many
constructed message)	occurrences (see subclause 10.3).
Message not Compatible with	The received message was not compatible with the receiver state (see
Receiver State	subclause 10.4).
Semantic Error	The received message included a semantic error (see subclause 10.4).
Transfer Syntax Error	The received message included a transfer syntax error (see subclause

	10.2).
Unspecified	Sent when none of the above cause values applies but still the cause is
	protocol related.

Miscellaneous cause	Meaning
Control Processing Overload	Node B control processing overload.
Hardware Failure	Node B hardware failure.
Not enough User Plane Processing	Node B has insufficient user plane processing resources available.
Resources	
O&M Intervention	Operation and Maintenance intervention related to Node B equipment.
Unspecified	Sent when none of the above cause values applies and the cause is not
	related to any of the categories Radio Network Layer, Transport
	Network Layer or Protocol.

#### 9.2.1.7 CFN

Connection Frame Number for the radio connection, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CFN			INTEGER (0255)	

#### 9.2.1.8 CFN Offset

Void.

#### 9.2.1.9 C-ID

The C-ID (Cell identifier) is the identifier of a cell in one RNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
C-ID			INTEGER (065535)	

#### 9.2.1.9A Common Channels Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the allocated Spreading Factor. [FDD - For the PRACH, the reference spreading factor shall be the minimum possible spreading factor amongst the ones defined by the *RACH Slot Format* IE(s) in the Common Transport Channel Setup or Reconfiguration procedures.]

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Common Transport Channel Setup
- Common Transport Channel Deletion
- [FDD Common Transport Channel Reconfiguration]

For the Common Transport Channel Setup procedure, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall be credited to the Capacity Credit for the Common Transport Channel Deletion one.

[FDD - For the Common Transport Channel Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited if this difference is negative).]

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the "DL cost" shall be applied to the "DL or Global Capacity Credit" and the "UL Cost" shall be applied to

the "UL Capacity Credit". If it is modelled as shared resources, both the "DL cost" and the "UL cost" shall be applied to the "DL or Global Capacity Credit".

[FDD - When the Common Transport Channel Setup, Deletion or Reconfiguration procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH and AICH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

[FDD - The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by a physical channel, the cost credited to or debited from the Capacity Credit for this physical channel shall be taken as N times the cost given in the consumption law, where N is the number of channelization codes.]

[TDD - When the Common Transport Channel Setup or Deletion procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SF Allocation Law		1 <maxno ofSFs&gt;</maxno 		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL cost	M		INTEGER (065535)	
>UL cost	М		INTEGER (065535)	

Range Bound	Explanation	
maxnoofSFs	Maximum number of Spreading Factors	

#### 9.2.1.9B Common Measurement Accuracy

The Common Measurement Accuracy IE indicates the accuracy of the common measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Common Measurement Accuracy	М			
>T <sub>UTRAN-GPS</sub> Measurement Accuracy Class				
>>T <sub>UTRAN-GPS</sub> Measurement Accuracy Class	М		T <sub>UTRAN-GPS</sub> Accuracy Class 9.2.1.64C	
>T <sub>UTRAN-GANSS</sub> Measurement Accuracy Class				
>>T <sub>UTRAN-GANSS</sub> Measurement Accuracy Class	M		T <sub>UTRAN-GANSS</sub> Accuracy Class 9.2.1.98	

#### 9.2.1.10 Common Measurement Object Type

Void.

#### 9.2.1.11 Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Type			ENUMERATED (	"UL Timeslot ISCP" is used
			Received Total Wide	by TDD only,
			Band Power,	"Acknowledged PRACH
			Transmitted Carrier Power,	Preambles", 'DL Transmission Branch
			Acknowledged PRACH	Load', 'E-DCH RACH
			Preambles,	Report' are used by FDD
			UL Timeslot ISCP,	only,
			NotUsed-1.	'UpPCH interference' is
			NotUsed-2,	used by 1.28Mcps TDD only.
			UTRAN GPS Timing of	This IE shall never be set
			Cell Frames for UE	to the values that are
			Positioning,	prefixed "NotUsed-".
			SFN-SFN Observed	[TDD - The IE Type
			Time Difference,	"Transmitted carrier power
			Transmitted carrier power of all codes not	of all codes not used for HS transmission"
			used for HS	corresponds to the
			transmission, HS-DSCH	measurement "Transmitted
			Required Power,	carrier power of all codes
			HS-DSCH Provided Bit	not used for HS-PDSCH
			Rate, Received Total	[TDD - E-AGCH, E-HICH]
			Wide Band Power for	or HS-SCCH transmission"
			Cell Portion, Transmitted	in [5] and [23].]
			Carrier Power for Cell Portion, Transmitted	[FDD - The IE Type "Transmitted carrier power
			carrier power of all	of all codes not used for
			codes not used for HS-	HS transmission"
			PDSCH HS-SCCH E-	corresponds to the
			AGCH E-RGCH or E-	measurement "Transmitted
			HICH transmission for	carrier power of all codes
			Cell Portion, UpPCH	not used for HS-PDSCH
			Interference, DL	HS-SCCH E-AGCH E-
			Transmission Branch	RGCH or E-HICH
			Load, HS-DSCH Required	transmission" in [4] and [22].]
			Power for Cell Portion,	[ <del></del> ]·]
			HS-DSCH Provided Bit	
			Rate for Cell Portion, E-	
			DCH Provided Bit Rate,	
			E-DCH Non-serving	
			Relative Grant Down	
			Commands,	
			Received Scheduled E- DCH Power Share,	
			Received Scheduled E-	
			DCH Power Share for	
			Cell Portion, UTRAN	
			GANSS Timing of Cell	
			Frames for UE	
			Positioning, E-DCH	
			RACH Report)	

## 9.2.1.12 Common Measurement Value

The Common Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Common Measurement Value	М			-	_	-
>Transmitted Carrier						
Power						
>>Transmitted	M		INTEGER	According to mapping	_	
Carrier Power			(0100)	in [22] and [23]		
Value >Received Total						
Wide Band Power						
>>Received Total	М		INTEGER	According to mapping	_	
Wide Band Power			(0621)	in [22] and [23]		
Value						
>Acknowledged				FDD Only		
PRACH Preambles >>Acknowledged	M		INTEGER	According to manning		
>>Acknowledged PRACH Preamble	IVI		(0240,)	According to mapping in [22]	_	
Value			(0240,)	111 [22]		
>UL Timeslot ISCP				TDD Only		
>>UL Timeslot	М		INTEGER	According to mapping	_	
ISCP			(0127)	in [23]		
>Not used 1			NULL	This choice shall not		
				be used. Ignore if		
>Not Used 2			NULL	received.  This choice shall not		
>NOL 0860 Z			NOLL	be used. Ignore if		
				received.		
>Additional Common				See Note 1		
Measurement Values						
>>UTRAN GPS						
Timing Of Cell						
Frames for UE						
Positioning >>>Tutran-gps	M		9.2.1.64A		YES	ignore
Measurement	""		3.2.1.0 <del>4</del> /1		120	ignore
Value Information						
>>SFN-SFN						
Observed Time						
Difference			0.04.505		\/50	
>>>SFN-SFN Measurement	М		9.2.1.53E		YES	ignore
Value Information						
>>Transmitted						
Carrier Power Of All						
Codes Not Used						
For						
HSTransmission	2.4		INITEGED	A	\/F0	
>>>Transmitted Carrier Power Of	М		INTEGER (0100)	According to mapping in [22], measurement	YES	ignore
All Codes Not			(0100)	"Transmitted Carrier		
Used For				Power Of All Codes		
HSTransmission				Not Used For HS-		
Value				PDSCH, HS-SCCH,		
				E-AGCH, E-RGCH or		
				E-HICHTransmission"		
				and mapping in [23],		
				measurement "Transmitted Carrier		
	1			Power Of All Codes		
	1			Not Used For HS-		
	1			PDSCH Or HS-SCCH		
	1			Transmission"		
>>HS-DSCH						
Required Power >>>HS-DSCH	M		9.2.1.31lc		YES	ignore

			•			
Value Information						
>>HS-DSCH						
Provided Bit Rate						
>>>HS-DSCH	М		9.2.1.31lb		YES	ignore
Provided Bit Rate						
Value Information				EDD Oals		
>>Transmitted				FDD Only		
Carrier Power For Cell Portion						
>>>Transmitted		1 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Carrier Power		NrOfCel			GLOBAL	ignore
For Cell Portion		IPortion 1				
Value		s>				
>>>Cell	М		9.2.2.1Ca		_	
Portion ID						
>>>>Transmitte	M		INTEGER	According to mapping	_	
d Carrier Power			(0100)	in [22]		
Value						
>>Received Total				FDD Only		
Wide Band Power						
For Cell Portion					01.05	
>>>Received Total Wide Band		1 <max NrOfCel</max 			GLOBAL	ignore
Power For Cell		IPortion				
Portion Value						
>>>Cell	M	S>	9.2.2.1Ca		_	
Portion ID	IVI		3.2.2.10a		_	
>>>Received	М		INTEGER	According to mapping	_	
Total Wide	141		(0621)	in [22]		
Band Power			(0.110=1)	[]		
Value						
>>Transmitted				FDD Only		
Carrier Power Of All						
Codes Not Used						
For HS-PDSCH,						
HS-SCCH, E-						
AGCH, E-RGCH or						
E-HICH						
Transmission For						
Cell Portion >>>Transmitted		1 4 2 2 2 4			GLOBAL	ignoro
Carrier Power Of		1 <max NrOfCel</max 			GLOBAL	ignore
All Codes Not		IPortion				
Used For HS-		s>				
PDSCH, HS-		0,				
SCCH, E-AGCH,						
E-RGCH or E-						
HICH						
Transmission						
For Cell Portion						
Value						
>>>Cell	М		9.2.2.1Ca		-	
Portion ID			INITEGES	A		
>>>>Transmitte	M		INTEGER	According to mapping	-	
d Carrier Power			(0100)	in [22]		
Of All Codes Not Used For						
HS-PDSCH,						
HS-SCCH, E-						
AGCH, E-						
RGCH or E-						
HICH						
Transmission						
Value						
>>UpPCH				1.28Mcps TDD Only		
interference				·		
>>>UpPCH	М		INTEGER	According to mapping	YES	ignore
interference Value			(0127,)	in [23]		

	T	1	1	T	1	
>>DL Transmission				FDD Only		
Branch Load						
>>>Node B DL	M	1	INTEGER	According to mapping	YES	ignore
Transmission			(0101,)	in [22]		J
Branch Load			(0)	[==]		
Values						
				EDD Oak		
>>HS-DSCH				FDD Only		
Required Power						
For Cell Portion						
>>>HS-DSCH		1 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Required Power		NrOfCel				J
For Cell Portion		<i>IPortion</i>				
Information						
	l	S>	0.00.40			
>>>Cell	M		9.2.2.1Ca		-	
Portion ID						
>>>HS-DSCH	M		9.2.1.31lc		_	
Required Power						
Value						
Information						
				EDD Oak		
>>HS-DSCH		1	1	FDD Only		
Provided Bit Rate		1				
For Cell Portion		<u> </u>				
>>>HS-DSCH		1 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Provided Bit		NrOfCel				5
Rate For Cell		IPortion 1				
Portion						
		S>				
Information		ļ	ļ <u></u>			
>>>Cell	M	1	9.2.2.1Ca		_	
Portion ID	<u>                                     </u>	<u> </u>	<u>                                      </u>		<u> </u>	
>>>HS-DSCH	M		9.2.1.31lb		_	
Provided Bit						
Rate Value						
		1	1			
Information		<del> </del>				
>>E-DCH Provided		1				
Bit Rate		<u> </u>				
>>>E-DCH	M		9.2.1.78		YES	ignore
Provided Bit Rate						-
Value Information						
>>E-DCH Non-		1	1	EDD Only		
		1		FDD Only		
serving Relative		1	1			
Grant Down		1	1			
Commands		<u></u>			<u> </u>	
>>>E-DCH Non-	М		INTEGER	Down Commands per	YES	ignore
serving Relative			(0100,)	second		3
Grant Down		1	(3,	2500.10		
Commands Value						
Information						
>>Received		1		FDD Only		
Scheduled E-DCH		1		According to definition		
Power Share		1	1	in [4]		
>>>Received	İ	1		' '	YES	ignore
Scheduled E-		'			''-0	1911016
DCH Power		1				
Share		ļ	ļ			
>>>RSEPS	M		INTEGER	According to mapping	_	
Value			(0151)	in [22]		
>>>RTWP*	0		INTEGER	According to mapping	_	
Value		1	(0621)	of RTWP in [22]		
	1	<del> </del>	(0021)			
>>Received				FDD only		
Scheduled E-DCH				According to definition		
Power Share for				in [4]		
Cell Portion						
>>>Received		1 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Scheduled E-		NrOfCel			- :==/ <b>:=</b>	3
DCH Power		IPortion				
Share For Cell		s>				
Portion Value						

>>>Cell Portion ID	М		9.2.2.1Ca		_	
>>>RSEPS for Cell Portion Value	M		INTEGER (0151)	According to mapping in [22].	-	
>>>>RTWP* for Cell Portion Value	0		INTEGER (0621)	According to mapping of RTWP in [22]	-	
>>UTRAN GANSS Timing Of Cell Frames for UE Positioning						
>>>T <sub>UTRAN-GANSS</sub> Measurement Value Information	M		9.2.1.100		YES	ignore
>>E-DCH RACH Report				FDD Only		
>>>E-DCH RACH Report Information		1< maxnoo fCommo nEDCH s >		The maximum repetitions should be limited to 1 so that this information is reported only once for a cell.	GLOBAL	ignore
>>>Granted E- DCH RACH Resources	M		INTEGER (0240,)	According to mapping in [25]	-	
>>>>Denied E- DCH RACH Resources	М	. 100	INTEGER (0240,)	According to mapping in [25]	-	

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

Range Bound	Explanation
MaxNrOfCellPortions	Maximum number of Cell Portions in a cell
maxnoofCommonEDCHs	Maximum number of Common E-DCH Resource Combination for a cell

#### 9.2.1.12A Common Measurement Value Information

The *Common Measurement Value Information* IE provides information both on whether the Common Measurement Value is provided in the message or not and if provided also the Common Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement Availability Indicator	М			
>Measurement Available				
>>Common Measurement Value	М		9.2.1.12	
>Measurement Not Available			NULL	

## 9.2.1.13 Common Physical Channel ID

Common Physical Channel ID is the unique identifier for one common physical channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID			INTEGER (0255)	

#### 9.2.1.13A Common Physical Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID	М		9.2.1.13	
Resource Operational State	М		9.2.1.52	
Availability Status	М		9.2.1.2	

#### 9.2.1.14 Common Transport Channel ID

Common Transport Channel ID is the unique identifier for one common transport channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID			INTEGER (0255)	

#### 9.2.1.14A Common Transport Channel Information Response

The *Common Transport Channel Information Response* IE provides information for Common Transport Channels that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Common Transport Channel ID	М		9.2.1.14		_	
Binding ID	0		9.2.1.4		_	
Transport Layer Address	0		9.2.1.63		-	
Broadcast Common Transport Bearer Indication	0		9.2.1.5B		YES	ignore
IP Multicast Data Bearer Indication	0		9.2.1.109		YES	ignore

#### 9.2.1.14B Common Transport Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	М		9.2.1.14	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

#### 9.2.1.15 Communication Control Port ID

A Communication Control Port corresponds to one signalling bearer between the CRNC and the Node B for the control of Node B Communication Contexts. The Node B may have multiple Communication Control Ports (one per Traffic Termination Point). The Communication Control Port is selected at creation of the Node B Communication Context. The Communication Control Port ID is the identifier of the Communication Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Communication Control Port ID			INTEGER (065535)	

#### 9.2.1.16 Configuration Generation ID

The Configuration Generation ID describes the generation of the configuration of logical resources in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Configuration Generation ID			INTEGER (0255)	Value "0" means "No configuration". At possible wraparound of the ID counter in CRNC the value "0" shall not be used.

## 9.2.1.17 Criticality Diagnostics

The *Criticality Diagnostics* IE is sent by a Node B or the CRNC when parts of a received message have not been comprehended or are missing, or if the message contained logical errors. When applicable, it contains information about which IEs that were not comprehended or were missing.

For further details on how to use the Criticality Diagnostics IE, see Annex C.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Procedure ID		01		Procedure ID is to be used if Criticality Diagnostics is part of Error Indication procedure, and not within the response message of the same procedure that caused the error	_	
>Procedure Code	М		INTEGER (0255)	oddodd trio orror	_	
>Ddmode	М		ENUMERATED ( TDD, FDD, Common,	"Common" = common to FDD and TDD.	-	
Triggering Message	0		ENUMERATED ( initiating message, successful outcome, unsuccessful outcome, outcome, outcome)	The Triggering Message is used only if the Criticality Diagnostics is part of Error Indication.	_	
Procedure Criticality	0		ENUMERATED ( reject, ignore, notify)	This Procedure Criticality is used for reporting the Criticality of the Triggering message (Procedure).	-	
Transaction ID	0		9.2.1.62		_	
Information Element Criticality Diagnostics		0 <max nooferro rs&gt;</max 			_	
>IE Criticality	М		ENUMERATED ( reject, ignore, notify)	The IE Criticality is used for reporting the criticality of the triggering IE. The value "ignore" shall never be used.	-	
>IE ID	М		INTEGER (065535)	The IE ID of the not understood or missing IE	-	
>Repetition Number	0		INTEGER (0255)	The Repetition Number IE gives:     for a not understood IE: The number of occurrences of the reported IE up to and including the not understood occurrence     for a missing IE: The number of occurrences up to but not including the missing occurrence. Note: All the counted occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality	_	

			above them.		
>Message Structure	0	9.2.1.45A	The Message Structure IE describes the structure where the not understood or missing IE was detected. This IE is included if the not understood IE is not the top level of the message.	YES	ignore
>Type Of Error	М	ENUMERATED ( not understood, missing, )		YES	ignore

Range Bound	Explanation		
maxnooferrors	Maximum number of IE errors allowed to be reported with a single		
	message.		

#### 9.2.1.18 CRNC Communication Context ID

The CRNC Communication Context ID is the identifier of the Communication Context in the CRNC.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
CRNC Communication Context			INTEGER (02^20 -	"2^20-1" is a reserved value
ID			1)	indicating all the CRNC
				Communication Contexts that
				can be reached by the
				Communication Control Port
				(All CRNCCC).

#### 9.2.1.18A CTFC

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, "TrCH1" corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. "TrCH2" corresponds to the transport channel having the next lowest transport channel identity, and so on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE CTFC Format	M			
>2 bits long				
>>CTFC value	M		INTEGER (03)	
>4 bits long				
>>CTFC value	M	•	INTEGER (015)	
>6 bits long				
>>CTFC value	M		INTEGER (063)	
>8 bits long				
>>CTFC value	M		INTEGER (0255)	
>12 bits long				
>>CTFC value	M		INTEGER (04095)	
>16 bits long				
>>CTFC value	M	•	INTEGER (065535)	
>max nb bits long		•		
>>CTFC value	М		INTEGER (0maxCTFC)	

Range Bound	Explanation
MaxCTFC	Maximum number of the CTFC value is calculated according to the following:
	$\sum_{i=1}^{I} (L_i - 1) P_i$
	with the notation according to ref. [18]

#### 9.2.1.19 DCH Combination Indicator

Void.

#### 9.2.1.20 DCH ID

The DCH ID is the identifier of an active dedicated transport channel. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCH ID			INTEGER (0255)	

#### 9.2.1.20A Dedicated Channels Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the [FDD - allocated Spreading Factor and the RL/RLS situation] [TDD - allocated Spreading Factor on each DPCH and the assigned timeslot]. [FDD - In Uplink, the reference spreading factor shall be the minimum spreading factor signalled in the Radio Link Setup Request message. This is signalled using the *Min UL Channelisation Code Length* IE.]

This capacity consumption law indicates the consumption law to be used with the following procedures :

- Radio Link Setup
- Radio Link Addition
- Radio Link Reconfiguration
- Radio Link Deletion
- [TDD Physical Shared Channel Reconfiguration]

For the Radio Link Setup and Radio Link Addition procedures, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall credited to the Capacity Credit for the Radio Link Deletion procedure. For the Radio Link Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited when this difference is negative).

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs and the UL costs shall be applied to the DL or Global Capacity Credit.

[FDD - For a Radio Link creating a Radio Link Set (first RL of a RLS), the cost for the RL (cost 2) and RLS (cost 1) shall be taken into account. When adding a Radio Link to a Radio Link Set, only the RL cost (cost 2) shall be taken into account.

In the case where multiple Radio Links are established in one procedure, for every created Radio Link Set, the first Radio Link is always the Radio Link with the lowest repetition number.]

[FDD - The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by either the radio links, the cost credited to or debited from the Capacity Credit shall be taken as N times the cost for one code, where N is the number of channelization codes.]

[TDD - The cost for a radio link is a sum of the costs for each DPCH. For the first DPCH assigned to any user in a cell within a timeslot, the initial cost for a DPCH in a timeslot (cost 1) and the cost for a DPCH (cost 2) shall be taken into account. For any DPCH that is not the first DPCH assigned for any user in a cell within a timeslot, only the cost for a DPCH (cost 2) shall be taken into account.]

[TDD - The cost for shared channels is the sum of the costs for each PDSCH and PUSCH assigned to a PUSCH or PDSCH set. For the first PDSCH or PUSCH assigned to any user in a cell within a timeslot, the initial cost for a PDSCH/PUSCH in a timeslot (cost 1) and the cost for a PDSCH/PUSCH (cost 2) shall be taken into account. For any PDSCH/PUSCH that is not the first PDSCH/PUSCH assigned to any user in a cell within a timeslot, only the cost for a PDSCH/PUSCH (cost 2) shall be taken into account.]

[TDD - In the case of Physical Shared Channel Reconfiguration, the sum of the consumption cost of the each PDSCH/PUSCH of the previous configuration shall be credited to the capacity credit, and the sum of the consumption cost of each PDSCH/PUSCH of the new configuration shall be subtracted from the capacity credit.]

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
SF Allocation Law		1 <maxno ofSFs&gt;</maxno 		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL Cost 1	M		INTEGER (065535)	[FDD - This is the cost of a RLS.] [TDD - This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>DL Cost 2	М		INTEGER (065535)	[FDD - This is the cost of a RL.] [TDD - This is the cost of a DPCH/PDSCH/PUSCH]
>UL Cost 1	M		INTEGER (065535)	[FDD - This is the cost of a RLS.] [TDD - This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>UL Cost 2	М		INTEGER (065535)	[FDD - This is the cost of a RL.] [TDD - This is the cost of a DPCH/PDSCH/PUSCH.]

Range Bound	Explanation		
maxnoofSFs	Maximum number of Spreading Factors		

#### 9.2.1.20B DL Or Global Capacity Credit

The capacity credit indicates to the CRNC the Downlink or global capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Or Global Capacity Credit			INTEGER (065535)	

### 9.2.1.20C DCH Information Response

The DCH Information Response IE provides information for DCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	-		-
DCH Information Response		1 <maxnoo fDCHs&gt;</maxnoo 		Only one DCH per set of coordinated DCHs shall be included	ŀ	
>DCH ID	M		9.2.1.20		-	
>Binding ID	0		9.2.1.4		-	
>Transport Layer Address	0		9.2.1.63		-	
>Transport Bearer Not Setup Indicator	0		9.2.2.4H	FDD only	YES	ignore

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCH per UE

#### 9.2.1.21 DL Power

The *DL Power* IE indicates a power level relative to the [FDD - primary CPICH power] [TDD - primary CCPCH power] configured in a cell. If Transmit Diversity is applied to a downlink physical channel, the *DL Power* IE indicates the power offset between the linear sum of the power for this downlink physical channel on all branches and the [FDD - primary CPICH power] [TDD - PCCPCH power] configured in a cell.

[FDD - If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols.] [FDD - If referred to an F-DPCH, it indicates the Reference F-DPCH TX Power.]

[TDD - If referred to a DPCH or PDSCH, it indicates the power of a spreading factor 16 code, the power for a spreading factor 1 code would be 12 dB higher. If referred to a SCCPCH, the *DL Power* IE specifies the maximum power of the SCCPCH.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power			INTEGER (-350150)	Value = DL Power /10 Unit: dB Range: -35.0 +15.0 dB Step: 0.1dB

#### 9.2.1.22 Dedicated Measurement Object Type

Void.

#### 9.2.1.23 Dedicated Measurement Type

The Dedicated Measurement Type identifies the type of measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Dedicated Measurement Type			ENUMERATED (	"RSCP" and "HS-SICH
			SIR,	reception quality" are used by
			SIR Error,	TDD only.
			Transmitted Code	"Rx Timing Deviation" and "Rx
			Power,	Timing Deviation 3.84 Mcps
			RSCP,	Extended" are used by
			Rx Timing Deviation,	3.84Mcps TDD only.
			Round Trip Time,	"Rx Timing Deviation LCR",
			,	"Angle Of Arrival LCR" are
			Rx Timing Deviation	used by 1.28Mcps TDD only.
			LCR,	"Round Trip Time", "SIR Error"
			Angle Of Arrival	are used by FDD only.
			LCR,	'Best Cell Portions' is used by
			HS-SICH reception	FDD only.
			quality,	"Rx Timing Deviation
			Best Cell Portions,	7.68Mcps" is used by
			Rx Timing Deviation	7.68Mcps TDD only.
			7.68Mcps,	
			Rx Timing Deviation	
			3.84 Mcps	
			Extended)	
Note: For definitions of the r	measurement t	ypes refer to	[4] and [5].	

## 9.2.1.24 Dedicated Measurement Value

The Dedicated Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Dedicated	М			•	_	
Measurement Value						
>SIR Value						
>>SIR Value	M		INTEGER	According to mapping	_	
			(063)	in [22] and [23]		
>SIR Error Value				FDD only		
>>SIR Error Value	M		INTEGER	According to mapping	_	
			(0125)	in [22]		
>Transmitted Code Power Value						
>>Transmitted	М		INTEGER	According to mapping	_	
Code Power Value			(0127)	in [22] and [23].		
				Values 0 to 9 and 123		
				to 127 shall not be		
				used.		
>RSCP				TDD only		
>>RSCP	M		INTEGER	According to mapping	_	
			(0127)	in [23]		
>Rx Timing Deviation				Applicable to		
Value			WITEOED	3.84Mcps TDD only		
>>Rx Timing	M		INTEGER	According to mapping	_	
Deviation Time			(08191)	in [23]		
>Round Trip Time	M		INTEGED	FDD only		
>>Round Trip Time	IVI		INTEGER	According to mapping	_	
>Additional			(032767)	in [22] See Note 1.		
>Additiorial Dedicated				See Note 1.		
Measurement Values						
>>Rx Timing				Applicable to		
Deviation Value				1.28Mcps TDD only		
LCR				1.20MCps 1DD Offly		
>>>Rx Timing	М		INTEGER	According to mapping	YES	reject
Deviation LCR			(0511)	in [23]	0	
>>Angle Of Arrival			( /	Applicable to		
Value LCR				1.28Mcps TDD only		
>>>AOA Value		1			YES	reject
LCR						
>>>AOA LCR	M		INTEGER	According to mapping	_	
			(0719)	in [23]		
>>>AOA LCR	M		ENUMERATE	According to mapping	_	
Accuracy Class			D(	in [23]		
			A, B, C, D, E,			
110 01011			F, G, H,)	A II II ( TDD		
>>HS-SICH				Applicable to TDD		
Reception Quality >>>HS-SICH		1		only	YES	
>>>no-oicn Reception		<i>'</i>			YES	reject
Quality Value						
>>>Failed HS-	M	<del>                                     </del>	INTEGER	According to mapping	_	
SICH	141		(020)	in [23]	_	
>>>Missed	M		INTEGER	According to mapping	_	
HS-SICH	141		(020)	in [23]		
>>>>Total HS-	М		INTEGER	According to mapping	_	
SICH			(020)	in [23]		
>>>Failed HS-	0		INTEGER	According to mapping	YES	reject
SICH LCR			(020)	in [23]	_	
extension			, ,	Mandatory for LCR		
				TDD when there are		
				more than 20 failed		
				HS-SICH		
>>>Missed	0		INTEGER	According to mapping	YES	reject
HS-SICH LCR			(020)	in [23]		
extension				Mandatory for LCR		
				TDD when there are		
	1	ĺ	1	more than 20 missed	ĺ	Ī

			HS-SICH		
>>>>Total HS- SICH LCR extension	0	INTEGER (020)	According to mapping in [23] Mandatory for LCR TDD when there are more than 20 total HS-SICH	YES	reject
>>Best Cell Portions			FDD only		
>>>Best Cell Portions	M	9.2.2.1Ba		YES	reject
>>Rx Timing Deviation Value 7.68Mcps			Applicable to 7.68Mcps TDD only		
>>>Rx Timing Deviation 7.68Mcps	M	INTEGER (065535)	According to mapping in [23]	YES	reject
>>Rx Timing Deviation Value 3.84Mcps Extended			Applicable to 3.84Mcps TDD only		
>>>Rx Timing Deviation 3.84Mcps Extended	M	INTEGER (032767)	According to mapping in [23]	YES	reject
>>Extended Round Trip Time			FDD only		
>>>Extended Round Trip Time Value	M	INTEGER (3276710304 1)	Continuation of intervals with step size as defined in [22].	YES	reject

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

#### 9.2.1.24A Dedicated Measurement Value Information

The *Dedicated Measurement Value Information* IE provides information both on whether or not the Dedicated Measurement Value is provided in the message or not and if provided also the Dedicated Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement	М			
Availability Indicator				
>Measurement Available				
>>Dedicated Measurement	М		9.2.1.24	
Value				
>>CFN	0		9.2.1.7	Dedicated Measurement Time
				Reference
>Measurement Not Available			NULL	

### 9.2.1.24B DGPS Corrections

The DGPS Corrections IE contains DGPS information used by the UE Positioning A-GPS method. For further details on the meaning of parameters, see [28].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GPS TOW	М		INTEGER (0604799)	Time in seconds. This field indicates the baseline time for which the corrections are valid.
Status/Health	M		ENUMERATED ( UDRE scale 1.0, UDRE scale 0.75, UDRE scale 0.5, UDRE scale 0.3, UDRE scale 0.1, no data, invalid data)	This field indicates the status of the differential corrections.
Satellite Information		1 <maxno Sat&gt;</maxno 		
>SatID	M		INTEGER (063)	Identifies the satellite and is equal to (SV ID No - 1) where SV ID No is defined in [27].
>IODE	M		BIT STRING (8)	This IE is the sequence number for the ephemeris for the particular satellite. It can be used to determine if new ephemeris is used for calculating the corrections that are provided. This eight-bit IE is incremented for each new set of ephemeris for the satellite and may occupy the numerical range of [0, 239] during normal operations.
>UDRE	M		ENUMERATED ( UDRE ≤1.0m, 1.0m < UDRE ≤ 4.0m, 4.0m < UDRE ≤ 8.0m, 8.0m < UDRE)	User Differential Range Error. This field provides an estimate of the uncertainty (1-\sigma) in the corrections for the particular satellite. The value in this field shall be multiplied by the UDRE Scale Factor in the common Corrections Status/Health field to determine the final UDRE estimate for the particular satellite
>PRC	М		INTEGER (-20472047)	Pseudo Range Correction Unit: m (meters) Step: 0.32 meters
>Range Correction Rate	М		INTEGER (-127127)	Unit: m/s Step: 0.032 m/s

Range Bound	Explanation
maxNoSat	Maximum number of satellites for which information can be provided

# 9.2.1.24C Delayed Activation

The *Delayed Activation* IE indicates that the activation of the DL power shall be delayed until an indicated CFN or until a separate activation indication is received.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Delayed Activation	M			
>CFN				
>>Activation CFN	M		CFN 9.2.1.7	
>Separate Indication			NULL	

## 9.2.1.24D Delayed Activation Update

The Delayed Activation Update IE indicates a change of the activation of the DL power for a specific RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned criticality
CHOICE Delayed	М				_	
Activation Update						
>Activate						
>>CHOICE Activation	M				_	
Type						
>>>Synchronised						
>>>Activation CFN	M		CFN 9.2.1.7		_	
>>>Unsynchronised			NULL			
>>Initial DL TX Power	М		DL Power		_	
			9.2.1.21			
>>First RLS Indicator	0		9.2.2.16A	FDD Only	_	
>>Propagation Delay	0		9.2.2.35	FDD Only	_	
>>Extended	0		9.2.2.35A	FDD Only	YES	reject
Propagation Delay						-
>Deactivate						
>>CHOICE	М				_	
Deactivation Type						
>>>Synchronised						
>>>>Deactivation	M		CFN 9.2.1.7		_	
CFN						
>>>Unsynchronised			NULL			

#### 9.2.1.24E Discard Timer

The *Discard Timer* IE defines the time to live for a MAC-hs SDU starting from the instant of its arrival into an HSDPA Priority Queue. The Node B shall use this information to discard out-of-data MAC-hs SDUs from the HSDPA Priority Queues.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Discard Timer			ENUMERATED (20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 250, 300, 400, 500, 750, 1000, 1250, 1500, 1750, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 7500,)	Unit: ms

## 9.2.1.25 Diversity Control Field

The Diversity Control Field indicates if the current RL may, must or must not be combined with the already existing RLs.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Diversity Control Field			ENUMERATED (	
_			May,	
			Must,	
			Must Not,	
			)	

## 9.2.1.26 Diversity Indication

Void.

9.2.1.26A DL DPCH Timing Adjustment

Void.

9.2.1.27 DSCH ID

Void.

9.2.1.27A DSCH Information Response

Void

9.2.1.28 DSCH Transport Format Set

Void.

9.2.1.29 DSCH Transport Format Combination Set

Void.

## 9.2.1.29A End Of Audit Sequence Indicator

Indicates if the AUDIT RESPONSE message ends an audit sequence or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	
			Reference		
End Of Audit Sequence			ENUMERATED (	"End of audit sequence" = all	
Indicator			End of audit	audit information has been	
			sequence,	provided by the Node B.	
			Not end of audit	"Not end of audit sequence" =	
			sequence)	more audit information is	
				available.	

## 9.2.1.29B FN Reporting Indicator

The Frame Number Reporting Indicator indicates if the SFN or CFN shall be included together with the reported measurement value.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FN Reporting Indicator			ENUMERATED ( FN Reporting Required, FN Reporting Not Required)	

# 9.2.1.30 Frame Handling Priority

This parameter indicates the priority level to be used during the lifetime of the DCH [TDD - DSCH] for temporary restriction of the allocated resources due overload reason.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Handling Priority			INTEGER (015)	"0" = lowest priority,
				 "15" = highest priority

# 9.2.1.31 Frame Offset

The Frame Offset is the required offset between the dedicated channel downlink transmission frames (CFN, Connection Frame Number) and the broadcast channel frame offset (Cell Frame Number). The Frame Offset is used in the translation between Connection Frame Number (CFN) on Iub/Iur and the least significant 8 bits of SFN (System Frame Number) on Uu. The Frame Offset is UE and cell specific.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Offset			INTEGER (0255)	Frames

## 9.2.1.31A IB\_OC\_ID

The IB OC ID identifies the occurrence of a specific Information Block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB OC ID			INTEGER (116)	Value 1 indicates the first occurrence for the specific Information Block.
				Value 2 indicates the second occurrence for the specific Information Block.
				Value 16 indicates the sixteenth occurrence for the specific Information Block.

## 9.2.1.31B GPS Navigation Model & Time Recovery

This IE contains subframes 1 to 3 of the GPS navigation message. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Navigation Message 1to3		1 <maxno Sat&gt;</maxno 		
>Transmission TOW	М		INTEGER (01048575)	Time of the Week when the message is broadcast.
>SatID	М		INTEGER (063)	Identifies the satellite and is equal to (SV ID No - 1) where SV ID No is defined in [27].
>TLM Message	M		BIT STRING (14)	
>Tlm Revd (C)	M		BIT STRING (2)	
>HO-Word	M		BIT STRING (22)	
>WN	M		BIT STRING (10)	
>C/A or P on L2	M		BIT STRING (2)	
>User Range Accuracy Index	M		BIT STRING (4)	
>SV Health	M		BIT STRING (6)	
>IODC	M		BIT STRING (10)	
>L2 P Data Flag	M		BIT STRING (1)	
>SF 1 Reserved	M		BIT STRING (87)	
>T <sub>GD</sub>	M		BIT STRING (8)	
>t <sub>oc</sub>	M		BIT STRING (16)	
>af <sub>2</sub>	M		BIT STRING (8)	
>af <sub>1</sub>	M		BIT STRING (16)	
>af <sub>0</sub>	M		BIT STRING (22)	
>C <sub>rs</sub>	M		BIT STRING (16)	
>∆n	M		BIT STRING (16)	
>M <sub>0</sub>	M		BIT STRING (32)	
>C <sub>uc</sub>	M		BIT STRING (16)	
>e	M		BIT STRING (32)	
>C <sub>us</sub>	M		BIT STRING (16)	
>(A) <sup>1/2</sup>	M		BIT STRING (32)	
>t <sub>oe</sub>	M		BIT STRING (16)	
>Fit Interval Flag	M		BIT STRING (1)	
>AODO	M		BIT STRING (5)	
>C <sub>ic</sub>	M		BIT STRING (16)	
>OMEGA <sub>0</sub>	M		BIT STRING (32)	
>C <sub>is</sub>	М		BIT STRING (16)	
>i <sub>0</sub>	М		BIT STRING (32)	
>C <sub>rc</sub>	М		BIT STRING (16)	
>ω	M		BIT STRING (32)	
>OMEGAdot	М		BIT STRING (24)	
>ldot	M		BIT STRING (14)	
>Spare/zero fill	M		BIT STRING (20)	

Range Bound	Explanation
maxNoSat	Maximum number of satellites for which information can be provided

# 9.2.1.31C GPS Ionospheric Model

This IE provides the information regarding the GPS Ionospheric Model. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
$\alpha_0$	M		BIT STRING (8)	
$\alpha_1$	M		BIT STRING (8)	
$\alpha_2$	M		BIT STRING (8)	
$\alpha_3$	M		BIT STRING (8)	
$\beta_0$	M		BIT STRING (8)	
β1	M		BIT STRING (8)	
$\beta_2$	M		BIT STRING (8)	
$\beta_3$	M		BIT STRING (8)	

## 9.2.1.31D GPS UTC Model

This IE provides the information regarding the GPS UTC Model. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
A <sub>1</sub>	M		BIT STRING (24)	
A <sub>0</sub>	M		BIT STRING (32)	
t <sub>ot</sub>	M		BIT STRING (8)	
$\Delta t_{LS}$	M		BIT STRING (8)	
WNt	M		BIT STRING (8)	
WN <sub>LSF</sub>	M		BIT STRING (8)	
DN	M		BIT STRING (8)	
$\Delta t_{LSF}$	M		BIT STRING (8)	

### 9.2.1.31E GPS Real-Time Integrity

This IE provides the information regarding the status of the GPS constellation. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Bad Satellites Presence	M			
>Bad Satellites				
>>Satellite Information		1 <maxno Sat&gt;</maxno 		
>>>BadSatID	M		INTEGER (063)	Identifies the satellite and is equal to (SV ID No - 1) where SV ID No is defined in [27].
>No Bad Satellites			NULL	

Range Bound	Explanation
maxNoSat	Maximum number of satellites for which information can be provided

### 9.2.1.31F GPS Almanac

This IE provides the information regarding the GPS Almanac. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
WN <sub>a</sub>	M		BIT STRING (8)	
Satellite Information	М	1 <maxno OfSatAlma nac&gt;</maxno 		See Note 1.
>DataID	M		INTEGER (03)	
>SatID	M		INTEGER (063)	Identifies the satellite and is equal to (SV ID No - 1) where SV ID No is defined in [27].
>e	M		BIT STRING (16)	
>t <sub>oa</sub>	M		BIT STRING (8)	
>δi	M		BIT STRING (16)	
>OMEGADOT	M		BIT STRING (16)	
>SV Health	M		BIT STRING (8)	
>A <sup>1/2</sup>	M		BIT STRING (24)	
>OMEGA <sub>0</sub>	M		BIT STRING (24)	
>M <sub>0</sub>	M		BIT STRING (24)	
>ω	М		BIT STRING (24)	
>af <sub>0</sub>	М		BIT STRING (11)	
>af <sub>1</sub>	M		BIT STRING (11)	
SV Global Health	0		BIT STRING (364)	

Note 1: This information element is a simplified representation of the ASN.1 description. Repetitions 1 through maxNoSat and repetitions maxNoSat+1 through maxNoOfSatAlmanac are represented by separate ASN.1 structures with different criticality.

Range Bound	Explanation				
maxNoOfSatAlmanac	Maximum number of satellite almanacs for which information can be				
	provided				

# 9.2.1.31G GPS Receiver Geographical Position (GPS RX Pos)

The GPS Receiver Geographical Position is used to identify the geographical coordinates of a GPS receiver relevant for a certain Information Exchange Object.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	М		ENUMERATED ( North, South)	
Degrees of Latitude	M		INTEGER (02 <sup>23</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>23</sup> X /90 < N+1 X being the latitude in degree (0° 90°)
Degrees of Longitude	M		INTEGER (-2 <sup>23</sup> 2 <sup>23</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>24</sup> X /360 < N+1 X being the longitude in degree (-180°+180°)
Direction of Altitude	M		ENUMERATED ( Height, Depth)	
Altitude	M		INTEGER (02 <sup>15</sup> -1)	The relation between the value (N) and the altitude (a) in meters it describes is N≤ a <n+1, except="" for="" n="2&lt;sup">15-1 for which the range is extended to include all greater values of (a).</n+1,>

# 9.2.1.31Ga HSDPA Capability

This parameter defines the HSDPA capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HSDPA Capability			ENUMERATED (HSDPA Capable, HSDPA non Capable)	

# 9.2.1.31H HS-DSCH Information To Modify

The *HS-DSCH Information To Modify* IE is used for modification of HS-DSCH information in a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		0 <maxno ofMACdFl ows&gt;</maxno 			-	
>HS-DSCH MAC-d Flow ID	М		9.2.1.311		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		-	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
Priority Queue Information		0 <maxno ofPrioQue ues&gt;</maxno 			_	
>CHOICE Priority Queue	М	0.007			_	
>>Add Priority Queue						
>>>Priority Queue ID	М		9.2.1.49C		_	
>>>Associated HS- DSCH MAC-d Flow	M		HS-DSCH MAC-d Flow ID 9.2.1.31I	Shall only refer to an HS-DSCH MAC-d flow already existing in the old configuration. Multiple Priority Queues can be associated with the same HS-DSCH MAC-d Flow ID.	_	
>>>Scheduling Priority Indicator	М		9.2.1.53H		_	
>>>T1	M		9.2.1.56a		_	
>>>Discard Timer >>>MAC-hs Window Size	O M		9.2.1.24E 9.2.1.38B		_	
>>>MAC-hs Guaranteed Bit Rate	0		9.2.1.38Aa		_	
>>>MAC-d PDU Size Index		1 <maxno ofMACdP DUindexes &gt;</maxno 			_	
>>>SID	М		9.2.1.531	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>>>>MAC-d PDU Size	M		9.2.1.38A	Shall be ignored if <i>Maximum</i>		

				MAC-d PDU		
				Size Extended		
				IE is present.		
>>>RLC Mode	M		9.2.1.52B		_	
>>>Maximum MAC-d	0		MAC PDU		YES	reject
PDU Size Extended			Size			,
			Extended			
			9.2.1.38C			
>>>DL RLC PDU Size	0		9.2.1.122		Yes	ignore
Format			0.222			ignore
>>Modify Priority Queue						
>>>Priority Queue ID	М		9.2.1.49C	Shall only refer	_	
// Honly Queue ID	IVI		3.2.1.430	to a Priority	_	
				Queue already		
				existing in the		
				old		
				configuration.		
>>>Scheduling Priority	0		9.2.1.53H		_	
Indicator						
>>>T1	0		9.2.1.56a		_	
>>>Discard Timer	0		9.2.1.24E		_	
>>>MAC-hs Window	0		9.2.1.38B			
Size						
>>>MAC-hs Guaranteed	0		9.2.1.38Aa		_	
Bit Rate						
>>>MAC-d PDU Size		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Index		ofMACdP				
macx		DUindexes				
		>				
>>>SID	М		9.2.1.531	Shall be		
>>>3ID	IVI		9.2.1.001		_	
				ignored if		
				Maximum		
				MAC-d PDU		
				Size Extended		
				IE is present.		
>>>MAC-d PDU Size	M		9.2.1.38A	Shall be	_	
				ignored if		
				Maximum		
				MAC-d PDU		
				Size Extended		
				IE is present.		
>>>Maximum MAC-d	0		MAC PDU		YES	reject
PDU Size Extended			Size			
			Extended			
			9.2.1.38C			
>>>DL RLC PDU Size	0		9.2.1.122		Yes	ignore
Format	_					.5
>>Delete Priority Queue						
>>>Priority Queue ID	M		9.2.1.49C	Shall only refer	_	
Holly Queue ID	141		0.2.1.730	to a Priority		
				Queue already		
				existing in the		
				old		
MAGIL B		1	0.04.004	configuration.		
MAC-hs Reordering Buffer	0		9.2.1.38Ab		_	
Size for RLC-UM						
CQI Feedback Cycle k	0	ļ	9.2.2.21B	For FDD only	_	
CQI Repetition Factor	0		9.2.2.4Cb	For FDD only	_	
ACK-NACK Repetition Factor	0		9.2.2.a	For FDD only	_	
CQI Power Offset	0		9.2.2.4Ca	For FDD only	_	
ACK Power Offset	0		9.2.2.b	For FDD only	_	
NACK Power Offset	0		9.2.2.23a	For FDD only	_	
HS-SCCH Power Offset	0		9.2.2.181	For FDD only	_	
Measurement Power Offset	0	1	9.2.2.101 9.2.2.21C	For FDD only		
		+		FOLEDD OTHY	_	
HS-SCCH Code Change	0		9.2.1.31L		_	
Grant		1	0.00.465	FTDD :		
TDD ACK NACK Power	0		9.2.3.18F	For TDD only	_	

Offset						
HARQ Preamble Mode	0		9.2.2.18a	For FDD only	YES	ignore
HS-SICH SIR Target	0		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	ignore
UE Capabilities Information		01			YES	ignore
>HS-DSCH Physical Layer Category	М		9.2.1.31la		-	
>1.28 Mcps TDD Uplink Physical Channel Capability	0		9.2.3.5Gc	Applicable to 1.28Mcps TDD only	YES	ignore
>Number of Supported Carriers	0		ENUMERA TED ( One-one carrier, One-three carrier, Three-three carrier, One-six carrier, Three-six carrier, Six-six carrier,)	Applicable to 1.28Mcps TDD only This IE indicates the number of carrier(s) the UE can support at the same time, where 'x-y carrier' means x for the uplink, and y for the downlink.	YES	reject
>Multi-carrier HS-DSCH Physical Layer Category	0		9.2.1.31la	Applicable to 1.28Mcps TDD only	YES	ignore
HS-SICH TPC step size	0		9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	ignore
HS-PDSCH Code Change Grant	0		9.2.1.31N	For FDD only	YES	ignore
MIMO Mode Indicator	0		9.2.1.120	For FDD and 1.28Mcps TDD only	YES	reject
HS-DSCH MAC-d PDU Size Format	0		9.2.1.31ID		YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A	For FDD only	YES	ignore
Enhanced HS Serving CC Abort	0		ENUMERA TED (Abort Enhanced HS Serving CC,)	For FDD only	YES	reject
UE Support Indicator Extension	0		9.2.2.117		YES	ignore

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofPrioQueues	Maximum number of Priority Queues
maxnoofMACdPDUindexes	Maximum number of different MAC-d PDU SIDs

# 9.2.1.31HA HS-DSCH Information To Modify Unsynchronised

The *HS-DSCH Information To Modify Unsynchronised* IE is used for modification of HS-DSCH information in a Node B Communication Context with the Unsynchronised Radio Link Reconfiguration procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		0 <maxno ofMACdFl ows&gt;</maxno 			_	
>HS-DSCH MAC-d Flow ID	M		9.2.1.311		-	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Transport Bearer Request Indicator	M		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
Priority Queue Information		0 <maxno ofPrioQue ues&gt;</maxno 			_	
>Priority Queue ID	M		9.2.1.49C		_	
>Scheduling Priority Indicator	0		9.2.1.53H		-	
>Discard Timer	0		9.2.1.24E		_	
>MAC-hs Guaranteed Bit Rate	0		9.2.1.38Aa		-	
CQI Power Offset	0		9.2.2.4Ca	For FDD only	_	
ACK Power Offset	0		9.2.2.b	For FDD only	_	
NACK Power Offset	0		9.2.2.23a	For FDD only	_	
HS-SCCH Power Offset	0		9.2.2.181	For FDD only	_	
TDD ACK NACK Power Offset	0		9.2.3.18F	For TDD only	_	
HARQ Preamble Mode	0		9.2.2.18a	For FDD only	YES	ignore
HS-SICH SIR Target	0		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	ignore
<b>UE Capabilities Information</b>		01			YES	ignore
>HS-DSCH Physical Layer Category	M		9.2.1.31la		YES	ignore
>1.28 Mcps TDD Uplink Physical Channel Capability	0		9.2.3.5Gc	Applicable to 1.28Mcps TDD only	YES	ignore
>Number of Supported Carriers	0		ENUMERA TED ( One-one carrier, One-three carrier, Three-three carrier, One-six carrier, Three-six carrier, Six-six carrier,)	Applicable to 1.28Mcps TDD only This IE indicates the number of carrier(s) the UE can support at the same time, where 'x-y carrier' means x for the uplink, and y for the downlink.	YES	reject
>Multi-carrier HS-DSCH Physical Layer Category	0		9.2.1.31la	Applicable to 1.28Mcps TDD	YES	ignore

			only		
>MIMO SF Mode Supported For HS-PDSCH dual stream	0	Enumerated (SF1, SF1/SF16)	Applicable to 1.28Mcps TDD only	YES	ignore
HS-SICH TPC step size	0	9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	ignore
MIMO Mode Indicator	0	9.2.1.118	For FDD and 1.28Mcps TDD only	YES	reject
Sixtyfour QAM Usage Allowed Indicator	0	9.2.2.74A	For FDD only	YES	ignore
Enhanced HS Serving CC Abort	0	ENUMERA TED (Abort Enhanced HS Serving CC,)	For FDD only	YES	reject
UE Support Indicator Extension	0	9.2.2.117		YES	ignore

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofPrioQueues	Maximum number of Priority Queues

# 9.2.1.31Ha HS-DSCH Initial Capacity Allocation

The *HS-DSCH Initial Capacity Allocation* IE provides flow control information for each scheduling priority class for the HS-DSCH FP over Iub.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH Initial Capacity Allocation		1 <max noofPrio Queues &gt;</max 			_	
>Scheduling Priority Indicator	М		9.2.1.53H		_	
>Maximum MAC-d PDU Size	M		MAC-d PDU Size 9.2.1.38A	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>HS-DSCH Initial Window Size	М		9.2.1.31Hb		_	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.38C		YES	ignore

Range Bound	Explanation
maxnoofPrioQueues	Maximum number of Priority Queues

### 9.2.1.31Hb HS-DSCH Initial Window Size

Indicates the initial number of MAC-d PDUs (or octets in case *HS-DSCH MAC-d PDU Size Format* = "Flexible MAC-d PDU Size") that may be transmitted before new credits are received from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Initial Window Size			INTEGER (1255)	Number of MAC-d PDUs If HS-DSCH MAC-d PDU Size Format = "Flexible MAC-d PDU Size" the credit shall be determined in octets: credit (in octets) = Maximum MAC-d PDU Size Extended* HS-DSCH Initial Window Size

## 9.2.1.31I HS-DSCH MAC-d Flow ID

HS-DSCH MAC-d Flow ID is the unique identifier for one MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flow ID			INTEGER (07)	

# 9.2.1.31IA HS-DSCH MAC-d Flows Information

The *HS-DSCH MAC-d Flows Information* IE is used for the establishment of HS-DSCH MAC-d flows for a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow		1 <maxno< th=""><th></th><th></th><th>_</th><th></th></maxno<>			_	
Specific Information		ofMACdFI				
_		ows>				

>HS-DSCH MAC-d Flow ID	М	1	9.2.1.311		_	1
	M					
>Allocation/Retention Priority	IVI		9.2.1.1A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	1	
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
Priority Queue Information		1 <maxno ofPrioQue ues&gt;</maxno 			-	
>Priority Queue ID	М		9.2.1.49C		_	
>Associated HS-DSCH MAC-d Flow	М		HS-DSCH MAC-d Flow ID 9.2.1.31I	The HS-DSCH MAC-d Flow ID shall be one of the flow IDs defined in the HS-DSCH MAC-d Flow Specific Information of this IE. Multiple Priority Queues can be associated with the same HS-DSCH MAC-d Flow ID.	_	
>Scheduling Priority Indicator	М		9.2.1.53H		_	
>T1	M		9.2.1.56a		_	
>Discard Timer	0		9.2.1.24E		_	
>MAC-hs Window Size	M		9.2.1.38B		_	
>MAC-hs Guaranteed Bit Rate	0		9.2.1.38Aa		1	
>MAC-d PDU Size Index		1 <maxno ofMACdP DUindexes</maxno 			-	
>>SID	М		9.2.1.531	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>>MAC-d PDU Size	М		9.2.1.38A	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>RLC Mode	M		9.2.1.52B			
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.38C		YES	reject
>DL RLC PDU Size Format	0		9.2.1.122		YES	ignore

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofPrioQueues	Maximum number of Priority Queues
maxnoofMACdPDUindexes	Maximum number of different MAC-d PDU SIDs

#### 9.2.1.31IB HS-DSCH MAC-d Flows To Delete

The *HS-DSCH MAC-d Flows To Delete* IE is used for the removal of HS-DSCH MAC-d flows from a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flows To Delete		1 <maxno ofMACdFl ows&gt;</maxno 		
>HS-DSCH MAC-d Flow ID	M		9.2.1.311	

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows

### 9.2.1.31IC HS-DSCH MAC-d PDU Size Capability

This parameter defines the capability for a Local Cell to support different MAC-d PDU Size formats. If this IE is set to "Flexible Size Capable" the Local Cell is "Indexed Size Capable" and "Flexible Size Capable". If not present or set to "Indexed Size Capable" the Local Cell is only "Indexed Size Capable".

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
HS-DSCH MAC-d PDU Size			ENUMERAT	
Capability			ED (Indexed	
			Size	
			Capable,	
			Flexible Size	
			Capable)	

#### 9.2.1.31ID HS-DSCH MAC-d PDU Size Format

The *HS-DSCH MAC-d PDU Size Format* IE provides information about the type of MAC-d PDU Size Format used for HS-DSCH. "Indexed MAC-d PDU Size" uses MAC-d PDU sizes based on *SID* IE and *MAC-d PDU Size* IE of *MAC-d PDU Size Index* IE. "Flexible MAC-d PDU Size" uses a flexible MAC-d PDU size with a maximum PDU size as defined by *Maximum MAC-d PDU Size Extended* IE of *Priority Queue Information* IE. The actual MAC-d PDU size is determined as specified in [24] and [32].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
HS-DSCH MAC-d PDU Size			ENUMERATED	
Format			(Indexed MAC-d	
			PDU Size, Flexible	
			MAC-d PDU Size)	

#### 9.2.1.31la HS-DSCH Physical Layer Category

The HS-DSCH Physical Layer Category IE defines a set of UE radio access capabilities related to HSDPA, as defined in [33].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Physical Layer Category			INTEGER (164,)	

#### 9.2.1.31laa HS-DSCH Provided Bit Rate Value

The HS-DSCH Provided Bit Rate Value IE indicates the HS-DSCH Provided Bit Rate as defined in [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Provided Bit Rate Value			INTEGER (02^24-1,, 2^24256,000,000)	Expressed in bit/s for FDD, 1.28Mcps TDD and 3.84Mcps TDD. For 7.68Mcps TDD the value shall be doubled to give the value in bit/s.

#### 9.2.1.31lb HS-DSCH Provided Bit Rate Value Information

The HS-DSCH Provided Bit Rate Value Information IE reports the HS-DSCH Provided Bit Rate Value IE for each priority class.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Provided Bit Rate Value Information		1 <maxno ofPriorityCl</maxno 		
value information		asses>		
>Scheduling Priority Indicator	М		9.2.1.53H	
>HS-DSCH Provided Bit	M		9.2.1.31laa	
Rate Value				

Range Bound	Explanation
maxNoofPriorityClasses	Maximum number of HS-DSCH Scheduling Priorities

#### 9.2.1.31lba HS-DSCH Required Power Value

The *HS-DSCH Required Power Value* IE indicates the minimum necessary power for a given priority class to meet the Guaranteed Bit Rate for all the established HS-DSCH connections belonging to this priority class.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Required Power			INTEGER (01000)	Expressed in thousandths of
Value				the max transmission power

### 9.2.1.31Ic HS-DSCH Required Power Value Information

The *HS-DSCH Required Power Value Information* IE reports the *HS-DSCH Required Power Value* IE for each priority class. For each priority class, a list of UEs, identified by the *CRNC Communication Context* IEs, requiring a particularly high amount of power to meet the Guaranteed Bit Rate for their established HS-DSCH connections may be included. Additionally, the *HS-DSCH Required Power Per UE Weight* IE may be included for each of those UEs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Required Power Value Information		1 <maxno ofPriorityCl asses&gt;</maxno 		
>Scheduling Priority Indicator	M		9.2.1.53H	
>HS-DSCH Required Power Value	М		9.2.1.31lba	
>HS-DSCH Required Power Per UE Information		0 <maxno ofContexts onUeList&gt;</maxno 		List of UEs with Guaranteed Bit Rate indicating their required power consumption relative to the HS-DSCH Required Power Value.
>>CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC" shall not be used.
>>HS-DSCH Required Power Per UE Weight	0		INTEGER (0100)	Expressed in percentage of the value provided in the HS-DSCH Required Power Value IE

Range Bound	Explanation
maxNoofContextsonUeList	Maximum number of Communication Contexts to include in the list of UEs
maxNoofPriorityClasses	Maximum number of HS-DSCH Scheduling Priorities

## 9.2.1.31J HS-DSCH RNTI

The HS-DSCH RNTI is used for the UE-specific CRC in HS-SCCH and HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH RNTI			INTEGER (065535)	

## 9.2.1.31K HS-SCCH Code Change Indicator

The HS-SCCH Code Change Indicator indicates whether the HS-SCCH Code change is needed or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change			ENUMERATED (HS-	
Indicator			SCCH Code Change	
			needed)	

## 9.2.1.31L HS-SCCH Code Change Grant

The HS-SCCH Code Change Grant IE indicates that modification of HS-SCCH Codes is granted.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change Grant			ENUMERATED (Change Granted)	

## 9.2.1.31M HS-PDSCH Code Change Indicator [FDD]

The HS-PDSCH Code Change Indicator indicates whether the HS-PDSCH Code change is needed or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-PDSCH Code Change			ENUMERATED (HS-	
Indicator			PDSCH Code	
			Change needed)	

### 9.2.1.31N HS-PDSCH Code Change Grant [FDD]

The HS-PDSCH Code Change Grant IE indicates that modification of HS-PDSCH Codes is granted.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-PDSCH Code Change			ENUMERATED	
Grant			(Change Granted)	

## 9.2.1.32 IB\_SG\_DATA

Segment as defined in ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_DATA			BIT STRING	Contains "SIB data fixed" or "SIB data variable" in segment as encoded in ref. [18]. See Annex D

# 9.2.1.33 IB\_SG\_POS

The lowest position of a specific Information Block segment in the SFN cycle (IB\_SG\_POS < IB\_SG\_REP).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_POS			INTEGER (04094)	Only even positions are allowed. See ref. [18]

### 9.2.1.34 IB\_SG\_REP

Repetition distance for an Information Block segment. The segment shall be transmitted when SFN mod IB\_SG\_REP = IB\_SG\_POS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_REP			ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096)	Repetition period for the IB segment in frames

### 9.2.1.35 IB Type

The IB Type identifies a specific system information block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB Type			ENUMERATED ( MIB, SB1, SB2, SIB1, SIB2, SIB3, SIB4, SIB5, SIB6, SIB7, not-Used-SIB8, not-Used-SIB9, not-Used-SIB10, SIB11, SIB12, SIB13, SIB13.1, SIB13.2, SIB13.3, SIB13.4, SIB15.5, SIB15.1, SIB15.1, SIB15.2, SIB15.3, SIB16,	
			SIB17, SIB15.4, SIB15.5, SIB5bis, SIB15bis, SIB15bis, SIB15bis, SIB15.1bis, SIB15.2bis, SIB15.3bis, SIB15.3bis, SIB15.6, SIB15.7, SIB15.8, SIB15.2ter, SIB19)	

9.2.1.36 Indication Type

Void.

9.2.1.36A Information Exchange Object Type

Void.

# 9.2.1.36B Information Report Characteristics

The information report characteristics defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Report Characteristics Type	М			
>On Demand >Periodic			NULL	
>>CHOICE Information Report Periodicity Scale	М			The frequency with which the Node B shall send information reports.
>>>minute				
>>>Report Periodicity Value	М		INTEGER (160,)	Unit: min
>>>hour				
>>>Report Periodicity Value	М		INTEGER (124,)	Unit: h
>On Modification				
>>Information Threshold	0		9.2.1.36E	

# 9.2.1.36C Information Exchange ID

The Information Exchange ID uniquely identifies any requested information per Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Exchange ID	М		INTEGER (02^20-1)	

# 9.2.1.36D Information Type

The Information Type indicates which kind of information the Node B shall provide.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Information Type Item	М		ENUMERATE		_	
			D( GPS			
			Information,			
			DGPS			
			Corrections,			
			GPS RX Pos,			
			GANSS			
			Information,			
			DGANSS			
			Corrections, GANSS RX			
			Pos)			
GPS Information	C-GPS	0 <maxno GPSItems&gt;</maxno 			ı	
>GPS Information			ENUMERATE		_	
Item			D( GPS			
			Navigation			
			Model & Time			
			Recovery,			
			GPS Ionospheric			
			Model,			
			GPS UTC			
			Model, GPS Almanac,			
			GPS Almanac,			
			Time Integrity,			
0.41100.1.6			)		\/=0	
GANSS Information >GANSS Common	C-GANSS	01			YES	ignore
Data		01			_	
>>Ionospheric Model	0		BOOLEAN	True means requested	_	
>>Additional	0		Additional	Presence	YES	ignore
Ionospheric Model			Ionospheric Model	means		
			Request	requested.		
			9.2.1.107d			
>>Earth Orientation	0		Earth		YES	ignore
Parameters	]		Orientation		5	3
			Parameters			
			Request 9.2.1.107e			
			9.2.1.1076			
>GANSS Generic Data		0 <maxno GANSS&gt;</maxno 			_	
>>GANSS ID	0		9.2.1.104		_	
>>GANSS	0		BOOLEAN	True means	_	
Navigation Model And Time Recovery				requested		
>>GANSS Time	0		BIT	Defines the	_	
Model GNSS-			STRING(9)	time model		
GNSS				required.		
				Bit 1 is the MSB		
				and bit 9 is the		
				LSB (see		
				section 9.2.0).		
				Bit 1:GPS,		
				Bit 2:Galileo,		
				Bit 3:QZSS,		

				Bit 4:GLONASS		
				Other bits are reserved.		
>>GANSS UTC Model	0		BOOLEAN	True means requested	_	
>>GANSS Almanac	0		BOOLEAN	True means requested	-	
>>GANSS Real Time Integrity	0		BOOLEAN	True means requested	-	
>>GANSS Data Bit Assistance		01			-	
>>>GANSS TOD	М		INTEGER (086399)	The GANSS Time Of Day for which the data bits are requested	-	
>>>Data Bit Assistance		1			-	
>>>DGANSS Signal ID	М		BIT STRING(8)	Defined in [18]	-	
>>>>GANSS Data Bit Interval	М		INTEGER (015)	Defined in [18]	-	
>>>Satellite Information		0 <maxga NSSSat&gt;</maxga 			-	
>>>Sat ID	M		INTEGER(06 3)	Identifies the satellite and is equal to (SV ID No - 1)	-	
>>GANSS Additional Navigation Models And Time Recovery	0		GANSS Additional Navigation Models And Time Recovery Request 9.2.1.107f		YES	ignore
>>GANSS Additional UTC Models	0		GANSS Additional UTC Models Request 9.2.1.107g		YES	ignore
>>GANSS Auxiliary Information	0		GANSS Auxiliary Information Request 9.2.1.107h		YES	ignore
>>SBAS ID	C-GANSS- ID		9.2.1.107b		YES	ignore
DGANSS Corrections Req	C- DGANSS Correction s	1			YES	ignore
>DGANSS Signal ID	М		BIT STRING(8)	Defined in [18]	-	
>GANSS ID	0		9.2.1.104		-	

Condition	Explanation
DGANSSCorrections	The IE shall be present if the Information Type Item IE indicates
	"DGANSS Corrections".
GPS	The IE shall be present if the <i>Information Type Item</i> IE indicates "GPS
	Information".
GANSS	The IE shall be present if the <i>Information Type Item</i> IE indicates
	"GANSS Information".
GANSS-ID	This IE shall be present if the GANSS ID IE indicates 'SBAS'.

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE
maxNoGPSItems	Maximum number of GPS Information Items supported in one
	Information Exchange
maxNoGANSS	Maximum number of GANSS Systems

#### 9.2.1.36E Information Threshold

The Information Threshold indicates which kind of information shall trigger the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Type	M			
Item				
>DGPS				
>>PRC Deviation	M		ENUMERATED (1, 2, 5, 10,)	PRC deviation in meters from the previously reported value, which shall trigger a report
>DGANSS				
>>PRC Deviation	M		ENUMERATED (1, 2, 5, 10,)	PRC deviation in meters from the previously reported value, which shall trigger a report

#### 9.2.1.36F IPDL Indicator

Indicates if IPDL periods shall be active or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
IPDL Indicator			ENUMERATED (	
			active,	
			inactive)	

### 9.2.1.37 Limited Power Increase

Void.

## 9.2.1.37A Local Cell Group ID

The Local Cell Group ID represents resources in the Node B, which have been pooled from a capacity point of view.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Local Cell Group ID			Local Cell ID 9.2.1.38	

#### 9.2.1.38 Local Cell ID

The local cell ID represents resources in the Node B that can be used for the configuration of a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Local Cell ID			INTEGER	
			(0268435455)	

#### 9.2.1.38A MAC-d PDU Size

The MAC-d PDU Size provides the size in bits of the MAC-d PDU.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-d PDU Size			INTEGER (15000,)	In case of E-DCH, value 8 and values not multiple of 8 shall not be used.

#### 9.2.1.38Aa MAC-hs Guaranteed Bit Rate

The MAC-hs Guaranteed Bit Rate IE indicates the guaranteed number of bits per second that Node B should deliver over the air interface under normal operating conditions (provided there is data to deliver). If the MAC-hs Guaranteed Bit Rate IE is received with the value set to 0 during RL set up or modification, no guarantee is applied.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Guaranteed Bit Rate			INTEGER (02^24-1,,	Unit: bit/s
			2^24256,000,000)	

## 9.2.1.38Ab MAC-hs Reordering Buffer Size for RLC-UM

The *MAC-hs Reordering Buffer Size for RLC-UM* IE indicates the portion of the buffer in the UE that can be used for RLC-UM traffic (i.e. for Priority Queues whose *RLC Mode* IE is set to "RLC-UM").

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Reordering Buffer Size			INTEGER (0300,)	Unit: kBytes And N kBytes = N*1024 Bytes. The Node B shall use this value to avoid the overflow of the MAC-hs reordering buffer.

#### 9.2.1.38Ac MAC-hs Reset Indicator

The MAC-hs Reset Indicator IE indicates that a reset of the MAC-hs is not required.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Reset Indicator			ENUMERATED	
			(MAC-hs	
			Not Reset)	

#### 9.2.1.38B MAC-hs Window Size

The MAC-hs Window Size IE is used for MAC-hs PDU retransmission as defined in [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Window Size			ENUMERATED (4, 6, 8, 12, 16, 24, 32,)	For 1.28Mcps TDD when TSN length is configured to 9bits, ENUMERATED (32, 64, 96, 128, 160, 192, 256,)

#### 9.2.1.38C MAC PDU Size Extended

The MAC PDU Size Extended IE provides the size in octets of the MAC level PDU when an extended MAC level PDU size is required.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC PDU Size Extended			INTEGER (11504,,1505)	In case of E-DCH, value 1 shall not be used

### 9.2.1.39 Maximum DL Power Capability

This parameter indicates the maximum DL power capability for a local cell or a Power Local Cell Group within the Node B. The reference point is the antenna connector. If Transmit Diversity can be used in the local cell, the parameter indicates the maximum for the linear sum of the power that can be used on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum DL Power Capability			INTEGER (0500)	Unit: dBm
				Range: 050 dBm
				Step: 0.1 dB

#### 9.2.1.40 Maximum Transmission Power

The Maximum Transmission Power is the maximum value for the linear sum of the power of all downlink physical channels, that is allowed to be used in a cell. If Transmit Diversity is applied to one downlink physical channel, the power to be considered for this downlink physical channel is the linear sum of the power used for this downlink physical channel on all branches. [1.28Mcps TDD - For a multi-frequency cell, the Maximum Transmission Power is the maximum value for the linear sum of the power of all downlink physical channels, that is allowed to be used on one frequency in a cell.] The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Transmission Power			INTEGER (0500)	Unit: dBm
				Range: 050
				Step: 0.1 dB

### 9.2.1.40A Measurement Availability Indicator

Void.

## 9.2.1.40B Measurement Change Time

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale	M			
>millisecond				
>>Measurement Change Time Value	M		INTEGER (16000,)	Unit: ms Range: 1060000 ms Step: 10 ms

#### 9.2.1.41 Measurement Filter Coefficient

The Measurement Filter Coefficient determines the amount of filtering to be applied for measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Filter Coefficient			ENUMERATED ( 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 17, 19,)	

# 9.2.1.41A Measurement Hysteresis Time

The Measurement Hysteresis Time provides the duration during which a reporting criterion has to be fulfilled for the Measurement Reporting procedure to be triggered.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale	M			
>millisecond				
>>Measurement Hysteresis Time Value	M		INTEGER (16000,)	Unit: ms Range: 1060000 ms Step: 10 ms

#### 9.2.1.42 Measurement ID

The Measurement ID uniquely identifies any measurement per (Node B or Communication) Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement ID			INTEGER (02^20-1)	

### 9.2.1.43 Measurement Increase/Decrease Threshold

The Measurement Increase/Decrease Threshold defines the threshold that shall trigger Event C or D.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Measurement Increase/Decrease Threshold	М				-	
>Received Total Wide Band Power						
>>Received Total Wide Band Power	M		INTEGER (0620)	Unit: dB Range: 062 dB Step: 0.1 dB	-	
>Transmitted Carrier Power						
>>Transmitted Carrier Power	М		INTEGER (0100)	According to mapping in [22] and [23]	_	
>Acknowledged PRACH Preambles				FDD only		
>>Acknowledged PRACH Preambles	М		INTEGER (0240,)	According to mapping in [22]	_	
>UL Timeslot ISCP >>UL Timeslot ISCP	M		INTEGER (0126)	TDD only Unit: dB Range: 063 dB Step: 0.5 dB	_	
>SIR						
>>SIR	M		INTEGER (062)	Unit: dB Range: 031 dB Step: 0.5 dB	_	
>SIR Error	N 4		INITEGED	FDD only		
>>SIR Error	M		INTEGER (0124)	Unit: dB Range: 062 dB Step: 0.5 dB	_	
>Transmitted Code Power						
>>Transmitted Code Power	M		INTEGER (0112,)	Unit: dB Range: 056 dB Step: 0.5 dB	_	
>RSCP				TDD only		
>>RSCP	M		INTEGER (0126)	Unit: dB Range: 063 dB Step: 0.5 dB	_	
>Round Trip Time				FDD only		
>>Round Trip Time	M		INTEGER (032766)	Unit: chips Range: 0 2047.875 chips Step: 0.625 chips	_	
>Not Used 1			NULL	This choice shall not be used. Reject procedure if received.		
>Not Used 2			NULL	This choice shall not be used. Reject procedure if received.		
>Additional Measurement Thresholds				See Note 1.		
>>Transmitted Carrier Power Of All Codes Not Used For						
HSTransmission	1					
>>>Transmitted Carrier Power Of All Codes Not Used For HSTransmission	М		INTEGER (0100)	According to mapping in [22], measurement "Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICHTransmission"	YES	reject

>>Transmitted			and mapping in [23], measurement "Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Or HS-SCCH Transmission"  FDD only		
Carrier Power For Cell Portion					
>>>Transmitted Carrier Power For Cell Portion	M	INTEGER (0100)	Mapping identical to the one for Transmitted Carrier Power measurement in [22]	YES	reject
>>Received Total Wide Band Power For Cell Portion			FDD only		
>>>Received Total Wide Band Power For Cell Portion	M	INTEGER (0620)	Unit: dB Range: 062 dB Step: 0.1 dB	YES	reject
>>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E- AGCH, E-RGCH or E-HICH Transmission For Cell Portion			FDD only		
>>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission For Cell Portion	M	INTEGER (0100)	Mapping identical to the one for Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission measurement in [22]	YES	reject
>>UpPCH interference			1.28Mcps TDD Only		
>>>UpPCH interference Value	M	INTEGER (0127,)	According to mapping in [23]	YES	reject
>>Received Scheduled E- DCH Power Share			FDD only		
>>>RSEPS value	М	INTEGER (0151)	According to mapping in [22]	YES	reject
>>Received Scheduled E-DCH Power Share For Cell Portion			FDD only		
>>>RSEPS value	М	INTEGER (0151)	According to mapping in [22]	YES	reject
>>E-DCH RACH Report		WITEOED	FDD only	\/50	
>>> Denied E- DCH RACH Resources	M	INTEGER (0240,)	According to mapping in [25]	YES	reject

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

## 9.2.1.43A Measurement Recovery Behavior

This IE controls the Measurement Recovery Behavior.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery Behavior			NULL	

### 9.2.1.43B Measurement Recovery Reporting Indicator

This IE indicates the Measurement Recovery Reporting.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery Reporting Indicator			NULL	

## 9.2.1.43C Measurement Recovery Support Indicator

This IE indicates the Measurement Recovery Support.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery Support Indicator			NULL	

### 9.2.1.44 Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event A, B, E, F or On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Measurement Threshold	М				_	
>Received Total Wide Band Power						
>>Received Total	М		INTEGER	According to mapping	_	
Wide Band Power >Transmitted Carrier			(0621)	in [22] and [23]		
Power >>Transmitted	M		INTEGER	According to mapping	_	
Carrier Power >Acknowledged			(0100)	in [22] and [23] FDD only		
PRACH Preambles >>Acknowledged	M		INTEGER	According to mapping	_	
PRACH Preambles	IVI		(0240,)	in [22]	_	
>UL Timeslot ISCP >>UL Timeslot	M		INTEGER	TDD only According to mapping		
ISCP	IVI		(0127)	in [23]	_	
>SIR >>SIR	M		INTEGER	According to mapping		
	IVI		(063)	in [22] and [23]	_	
>SIR Error >>SIR Error	M		INTEGER	FDD only According to mapping		
	IVI		(0125)	in [22]	_	
>Transmitted Code Power						
>>Transmitted Code Power	М		INTEGER (0127)	According to mapping in [22] and [23]	_	
>RSCP			(- /	TDD only		
>>RSCP	М		INTEGER (0127)	According to mapping in [23]	_	
>Rx Timing Deviation			(51)	Applicable to 3.84Mcps TDD only		
>>Rx Timing Deviation	М		INTEGER (08191)	According to mapping in [23]	_	
>Round Trip Time			(00191)	FDD only		
>>Round Trip Time	М		INTEGER (032767)	According to mapping in [22]	_	
>Not Used 1			NULL	This choice shall not be used. Reject		
>Not Used 2			NULL	procedure if received.  This choice shall not		
SIVOL OSGU 2			NOLL	be used. Reject procedure if received.		
>Additional				See Note 1.		
Measurement Thresholds						
>>UTRAN GPS Timing Of Cell					_	
Frames For UE Positioning						
>>>T <sub>UTRAN-GPS</sub>	М		9.2.1.64B		YES	reject
Measurement Threshold						
Information						
>>SFN-SFN Observed Time						
Difference	NA		0.04.500		\/F0	
>>>SFN-SFN Measurement	M		9.2.1.53C		YES	reject
Threshold Information						
>>Rx Timing				Applicable to		
Deviation LCR >>>Rx Timing	M		INTEGER	1.28Mcps TDD Only According to mapping	YES	reject
Deviation LCR	IVI		(0511)	in [23]	IES	rejett

Reception Quality   S>HS:CICH   Reception Quality   Reception Qu	>>HS-SICH			Applicable to TDD		
Reception Quality >>>Transmitted Carrier Power Of All Codes Not Used For HSTransmission  >>>Transmission  M INTEGER (0.100) in [22], measurement "Transmitted Carrier Power Of All Codes Not Used For HSTransmission    National Carrier Power Of All Codes Not Used For HS- PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICHT Intransmission    National Carrier Power Of All Codes Not Used For HS- PDSCH Assemble of the Power of Cell Portion    National Carrier Power Of All Codes Not Used For HS- PDSCH Assemble of the Power of Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion    National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Cell Portion   National Carrier Power For Ce						
STransmitted   Carrier Power Of All Codes Not Used For HSTransmission		М			YES	reject
Codes Not Used   For HSTransmission   M			(020)	in [23]		
Codes Nat Used For HSTransmission  >>>Transmitted Carrier Power Of HSTransmission    Carrier Power Of Mail Codes Nat Used For HSTransmission    Carrier Power Of Mail Codes Nat Used For HSTransmission   Carrier Power Of Mail Codes Nat Used For HSTransmission   Carrier Power Of Mail Codes Nat   Carrier Power For Cell Portion						
For HSTransmission  >>>Transmitted Carrier Power Of All Codes Not Used For HSTransmission    SHS-DSCH   Fower Of All Codes Not Used For HSTransmission						
## Integral   Mapping   Ma						
>>>Transmitted Carrier Power Of All Codes Not Used For HSTransmission    National Power of All Codes Not Used For HSTransmission						
All Codes Not Used For HSTransmission  All Codes HSTransmission  All Codes HSTransmission  All Codes HSTransmission  All Codes HSTransmission  All Codes HSTransmission  All Codes HSTransmission  All Codes HSTransmission  All Codes HSTransmission  All Codes HSTransmission  All Codes HSTransmission  All Codes HSTRANSMISSION  All C		М	INTEGER	According to mapping	YES	reject
Used For HSTransmission			(0100)			
HSTransmission  Not Used For HS- PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICHTransmission and [23], measurement "Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Agequired Power >>HS-DSCH Required Power >>HS-DSCH Required Power Value >>Transmitted For Cell Portion  >>STransmitted Carrier Power For Cell Portion    Nature   Mapping identical to the one for Transmitted Carrier Power For Cell Portion   Power For Cell Portion						
PDSCH, RS-SCCH, E-AGCH, E-RGCH or E-HICHTransmission' and [23], measurement "Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH or HS-SCCH Transmitted Carrier Power For Cell Portion  >>Transmitted Carrier Power For Cell Portion    NTEGER   Mapping identical to the one for transmitted Carrier Power measurement in [22]						
E-AGCH, E-RGCH or E-HICHTransmission* and [23], measurement "Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmitted Carrier Power For Cell Portion   S>Received Total Wide Band Power For Cell Portion   S>Received Total Wide Band Power For Cell Portion   S>Transmitted   M (0.621)   Transmitted Carrier Power For Cell Portion   S>Transmitted Carrier Power Mide Band Power For Cell Portion   S>Received Total Wide Band Power For Cell Portion   Transmitted Carrier Power Of All Codes Not Used For MS-PDSCH, HS-SCCH, E-RGCH or E-HICH Transmission For Cell Portion   SPORCH	no transmission					
E-HICHTransmission' and [23], measurement "Transmission' and [23], measurement "Transmited Carrier Power Of All Codes Not Used For HS-DSCH Required Power  >>HS-DSCH Required Power  >>HS-DSCH Required Power Malue  >>Transmited Carrier Power For Cell Portion  >>Transmited Carrier Power For Cell Portion  >>Received Total Wide Band Power For Cell Portion  >>Received Total Wide Band Power For Cell Portion  >>Received Total Wide Band Power For Cell Portion  >>Received Total Wide Band Power For Cell Portion  >>Received Total Wide Band Power For Cell Portion  >>Received Total Wide Band Power For Cell Portion    Transmitted Carrier Power For Wide Power Measurement in [22]  >>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission For Cell Portion    Transmission For Cell Portion						
and [23], measurement "Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Transmitted Carrier Power For Cell Portion  >>Transmitted Carrier Power For Cell Portion    Soch Elevation   M						
Transmitted Carrier   Power Of All Codes Not Used For HS-PSCH   S-SCCH, E-RGCH or E-HICH Transmission   Power Of All Codes Not Used For HS-PSCH, HS-SCCH, E-RGCH or E-HICH Transmission   Power Of All Codes Not Used For Cell Portion   Power Mapping identical to the one for Transmitted Carrier Power Of All Codes Not Used For HS-PSCH, HS-SCCH, E-RGCH or E-HICH Transmission   Power Of All Codes Not Used For HS-PSCH, HS-SCCH, E-RGCH or E-HICH Transmission   Power Of HICH E-HICH Transmission   Powe						
Power Of All Codes   Not Used For HS-PDSCH or HS-SCCH   Transmission"						
Not Used For HS-PDSCH or HS-SCCH Transmission"						
PDSCH Or HS-SCCH   Transmission*						
S>HS-DSCH   Required Power   Power						
SHS-DSCH   Required Power   Paguired						
SSSHS-DSCH   Required Power Value   STransmitted   Carrier Power For Cell Portion   SSTransmitted   Carrier Power Of All Codes Not Used For HS-POSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission For Cell Portion   SSTransmitted   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-AGCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission   Carrier Power Of						
Required Power Value  >>Transmitted Carrier Power For Cell Portion  >>>Transmitted Carrier Power For Cell Portion    Seceived Total Wide Band Power For Cell Portion			00:00		\/=c	ļ
Value  >>Transmitted Carrier Power For Cell Portion  >>Transmitted Carrier Power For Cell Portion    Social Pottion		M	9.2.1.31lba		YES	reject
>>Transmitted Carrier Power For Cell Portion  >>>Transmitted Carrier Power For Cell Portion  >>>Received Total Wide Band Power For Cell Portion  >>>Received Total Wide Band Power For Cell Portion    Name						
Cell Portion				FDD only		
S>>Transmitted Carrier Power For Cell Portion						
Carrier Power For Cell Portion    Carrier Power For Cell Portion   Carrier Power measurement						
Cell Portion  Transmitted Carrier Power measurement in [22]  >>Received Total Wide Band Power For Cell Portion  >>>Received Total Wide Band Power For Cell Portion    Social Portion   Social Portion		M			YES	reject
>>Received Total Wide Band Power For Cell Portion  >>Received Total Wide Band Power For Cell Portion  >>Received Total Wide Band Power For Cell Portion    NTEGER			(0100)			
>>Received Total Wide Band Power For Cell Portion  >>Received Total Wide Band Power For Cell Portion  >>Received Total Wide Band Power For Cell Portion    Name						
Wide Band Power For Cell Portion  >>>Received Total Wide Band Power For Cell Portion    Name						
For Cell Portion  >>>Received Total Wide Band Power For Cell Portion    Portion				FDD only		
>>>Received Total Wide Band Power For Cell Portion    NTEGER (0621)   Total Wide Band Power Measurement						
Total Wide Band Power For Cell Portion    Commonship of the Cell Portion   Commonship of the Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Used For HS-PDSCH, HS-SCH, HS-SCH, HS-SCH, HS-SCH, HS-SCH, E-AGCH, E-RGCH or E-HICH Transmission For Cell Portion   INTEGER (0100)   INTEG		М	INTEGER	Mapping identical to	YES	reject
Portion  Power measurement in [22]  >>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E- AGCH, E-RGCH or E-HICH Transmission For Cell Portion    Name	Total Wide Band		(0621)			,,,,,,
in [22]  >>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E- AGCH, E-RGCH or E-HICH Transmission For Cell Portion    Note of the content of the con						
>>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E- AGCH, E-RGCH or E-HICH Transmission For Cell Portion  >>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH E-RGCH or E- HICH Transmission Value For Cell Portion  >>UpPCH interference	Portion					
Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E- AGCH, E-RGCH or E-HICH Transmission For Cell Portion  >>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission Value For Cell Portion    INTEGER (0100)   Mapping identical to the one for the one f	STransmitted					+
Codes Not Used For HS-PDSCH, HS-SCCH, E- AGCH, E-RGCH or E-HICH Transmission For Cell Portion  >>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission Value For Cell Portion    INTEGER				וווט טט ו		
HS-SCCH, E- AGCH, E-RGCH or E-HICH Transmission For Cell Portion  >>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission Value For Cell Portion    M						
AGCH, E-RGCH or E-HICH Transmission For Cell Portion  >>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission Value For Cell Portion    INTEGER (0100)   Mapping identical to the one for Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission measurement in [22]    1.28Mcps TDD Only						
E-HICH Transmission For Cell Portion  >>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission Value For Cell Portion    INTEGER (0100)   Mapping identical to the one for Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission measurement in [22]    1.28Mcps TDD Only						
Transmission For Cell Portion  >>>Transmitted M INTEGER (0100)  All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission Value For Cell Portion  >>UpPCH interference  INTEGER (Mapping identical to YES reject the one for Transmitted Carrier Power Of All Codes Not Used For HS-Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-AGCH or E-HICH Transmission measurement in [22]						
Cell Portion  >>>Transmitted M Carrier Power Of All Codes Not Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission Value For Cell Portion    Napping identical to the one for the one for Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS-SCCH, E-AGCH, E-AGCH or E-HICH Transmission measurement in [22]    1.28Mcps TDD Only	_					
>>>Transmitted M (0100) INTEGER Mapping identical to the one for Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-RGCH or E-HICH Transmission Value For Cell Portion Power Of All Codes (1.28Mcps TDD Only)  INTEGER Mapping identical to the one for Transmitted Carrier Power Of All Codes Not Used For HS-Power Of All Codes Not Used For HS-Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-AGCH or E-HICH Transmission measurement in [22]						
All Codes Not Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission Value For Cell Portion  All Codes Power Of All Codes Not Used For HS- PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission measurement in [22]  1.28Mcps TDD Only		М			YES	reject
Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission Value For Cell Portion  >>UpPCH interference  Power Of All Codes Not Used For HS- PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission measurement in [22]  1.28Mcps TDD Only			(0100)	the one for		
PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission Value For Cell Portion  >>UpPCH interference  Not Used For HS- PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission measurement in [22]  1.28Mcps TDD Only						
SCCH, E-AGCH, E-RGCH or E- HICH Transmission Value For Cell Portion  >>UpPCH interference  PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission measurement in [22]  1.28Mcps TDD Only						
E-RGCH or E- HICH Transmission Value For Cell Portion  >>UpPCH interference  E-AGCH, E-RGCH or E-HICH Transmission measurement in [22]  1.28Mcps TDD Only						
HICH Transmission Value For Cell Portion  >>UpPCH interference  E-HICH Transmission measurement in [22]  1.28Mcps TDD Only						
Value For Cell Portion >>UpPCH interference  1.28Mcps TDD Only						
Portion				measurement in [22]		
>>UpPCH 1.28Mcps TDD Only interference						
interference				1 28Mone TDD Only		+
				1.20MOPS TOD OTHY		
		М	INTEGER	According to mapping	YES	reject

interference Value		(0127,)	in [23]		
>>DL Transmission		(0,)	FDD Only		
Branch Load			- ")		
>>>DL	M	INTEGER	According to mapping	YES	reject
Transmission		(0101,)	in [22]		
Branch Load					
Value					
>>HS-DSCH			FDD only		
Required Power					
For Cell Portion					
>>>HS-DSCH	M	HS-DSCH		YES	reject
Required Power		Required			
Value For Cell		Power Value			
Portion		9.2.1.31lba			
>>E-DCH Non-			FDD only		
serving Relative					
Grant Down					
Commands	1	INITEGED		\/=0	· · ·
>>>E-DCH Non-	M	INTEGER	Down Commands per	YES	reject
serving Relative		(0100,)	second		
Grant Down					
Commands Value			Applicable to		
>>Rx Timing			Applicable to		
Deviation 768	1.4	INITEGED	7.68Mcps TDD Only	\/F0	
>>>Rx Timing	M	INTEGER	According to mapping	YES	reject
Deviation 768		(065535)	in [23] Applicable to		
>>Rx Timing					
Deviation 384			3.84Mcps TDD Only		
Extended	M	INTEGER	According to manning	YES	roinat
>>>Rx Timing Deviation 384	IVI		According to mapping	150	reject
Extended		(032767)	in [23]		
>>Extended Round			FDD only		
7>Extended Round			טט ז טוווא		
>>>Extended	M	INTEGER	Continuation of	YES	reject
Round Trip Time	171	(3276710304	intervals with step	120	reject
Value		1)	size as defined in		
, aido		''	[22].		
>>Received			FDD only		
Scheduled E-					
DCH Power					
Share					
>>>RSEPS value	M	INTEGER	According to mapping	YES	reject
		(0151)	in [22]		- ,
>>Received		, ,	FDD only		
Scheduled E-					
DCH Power					
Share for Cell					
Portion					
>>>RSEPS value	M	INTEGER	According to mapping	YES	reject
		(0151)	in [22]		·
>>Additional HS-			Applicable to		
SICH Reception			1.28Mcps TDD Only		
Quality					
>>>HS-SICH	M	INTEGER	According to mapping	YES	reject
Reception Quality		(020)	in [23]		
LCR			used when the		
			Measurement		
			Threshold Value for		
			HS-SICH Reception		
			Quality are more than		
			20, Measurement		
			Threshold Value = 20		
			+ IE Value		
>>UTRAN GANSS					
Timing Of Cell					
Timing Of Cell Frames For UE Positioning					

>>>T <sub>UTRAN-GANSS</sub> Measurement Threshold Information	M	9.2.1.99		YES	reject
>> E-DCH RACH Report			FDD only		
>>> Denied E- DCH RACH Resources	M	INTEGER (0240,)	According to mapping in [25]	YES	reject

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

# 9.2.1.45 Message Discriminator

This field is used to discriminate between Dedicated NBAP and Common NBAP messages.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Message Discriminator			ENUMERATED (	
			Common,	
			Dedicated)	

# 9.2.1.45A Message Structure

The *Message Structure* IE gives information for each level with assigned criticality in an hierarchical message structure from top level down to the lowest level above the reported level for the occurred error (reported in the *Information Element Criticality Diagnostics* IE).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Message Structure		1 <maxno oflevels&gt;</maxno 		The first repetition of the Message Structure IE corresponds to the top level of the message. The last repetition of the Message Structure IE corresponds to the level above the reported level for the occurred error of the message.
>IE ID	M		INTEGER (065535)	The IE ID of this level"s IE containing the not understood or missing IE.
>Repetition Number	0		INTEGER (1256)	The Repetition Number IE gives, if applicable, the number of occurrences of this level"s reported IE up to and including the occurrence containing the not understood or missing IE.  Note: All the counted occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality above them.

Range Bound	Explanation
maxnooflevels	Maximum number of message levels to report. The value for
	maxnooflevels is 256.

# 9.2.1.46 Message Type

The Message Type uniquely identifies the message being sent.

Procedure ID M 1	
>Procedure Code M INTEGER (0255) "0" = Audit	
"1" = Audit Required	
"2" = Block Resource	
"3" = Cell Deletion	
"4" = Cell Reconfiguration	n
"5" = Cell Setup	
"6" = Common Measuren	
"7" = Common Measuren	
"8" = Common Measuren	
"9" = Common Measuren	
"10" = Common Transpor	
"11" = Common Transpor	rt Channel
Reconfigure	of Channal Catura
"12" = Common Transpor	rt Channel Setup
"13" = Reset	. Command
"14" = Compressed Mode	
"16" = Dedicated Measur	
"17" = Dedicated Measur	
"18" = Dedicated Measur "19" = Dedicated Measur	
"20" = Dedicated Measur	
"21" = Error Indication (Fo	
Procedures)	oi Dedicated
"23" = Radio Link Additio	n
"24" = Radio Link Deletio	
"25" = Radio Link Failure	
"26" = Radio Link Restora	
"27" = Radio Link Setup	
"28" = Resource Status II	ndication
"29" = Synchronised Rad	
Reconfiguration Cancella	
"30" = Synchronised Rad	
Reconfiguration Commit	
"31" = Synchronised Rad	lio Link
Reconfiguration Preparat	tion
"32" = System Information	
"33" = Unblock Resource	
"34" = Unsynchronised R	adio Link
Reconfiguration	
"35" = Error Indication (Fo	or Common
Procedures)	
"37" = Physical Shared C	Channel
Reconfiguration	
"38" = Downlink Power Ti	
"39" = Radio Link Preemp	="
"40" = Information Excha	
"41" = Information Excha	
"42" = Information Excha	nge Termination
"43" = Information Report	
"44" = Cell Synchronisatio	
"45" = Cell Synchronisatio	on Poonfiguration
"46" = Cell Synchronisatio	
"47" = Cell Synchronisatio	
"48" = Cell Synchronisatio	
"49" = Cell Synchronisatio	
"50" = Bearer Rearranger "51" = Radio Link Activati	
'52' = Radio Link Parame   "53" = MBMS Notification	
"54" = UE Status Update	
>Ddmode M ENUMERATED ( Common = common to F	
TDD,	DD ana 1DD.
FDD,	
Common,	
)	

Type of Message	M	ENUMERATED (	
		Initiating	
		Message,	
		Successful	
		Outcome,	
		Unsuccessful	
		Outcome,	
		Outcome)	

#### 9.2.1.46a MICH CFN

The MICH CFN indicates the Connection Frame Number for the MICH. It corresponds to the Cell SFN of the frame in which the start of the S-CCPCH frame is located, see ref [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MICH CFN			INTEGER (04095)	

# 9.2.1.46A Minimum DL Power Capability

This parameter indicates the minimum DL power capability for a local cell within the Node B. The reference point is the antenna connector. If Transmit Diversity can be used in the local cell, the parameter indicates the minimum for the linear sum of the power that can be used on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum DL Power Capability			INTEGER (0800)	Unit: dBm Range: -30 +50 dBm Step: 0.1 dB

## 9.2.1.47 Minimum Spreading Factor

This parameter indicates the minimum spreading factor supported at a cell within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Spreading Factor			ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512)	[TDD - Mapping scheme for the minimum spreading factor 1 and 2: '256' means 1 '512' means 2]

## 9.2.1.47a Modification Period

The Modification Period of the MICH, see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Modification Period			ENUMERATED (1280, 2560, 5120, 10240,)	Unit: ms

#### 9.2.1.47A N\_INSYNC\_IND

This parameter is used by the Node B for achievement/re-achievement of UL synchronisation on the Uu interface as defined in ref. [10] and [21].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_INSYNC_IND			INTEGER (1256)	

#### 9.2.1.47B N OUTSYNC IND

This parameter defines the number of consecutive out-of-sync indications after which the timer T\_RLFAILURE shall be started (see also ref. [10] and [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_OUTSYNC_IND			INTEGER (1256)	

# 9.2.1.47C Neighbouring FDD Cell Measurement Information

This IE provides information on the FDD neighbouring cells used for the purpose of measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nd [14]
Primary Scrambling Code	M		9.2.2.34	

## 9.2.1.47D Neighbouring TDD Cell Measurement Information

This IE provides information on the 3.84Mcps TDD neighbouring cells used for the purpose of measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time Slot* IE and *Midamble Shift And Burst Type* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time Slot	0		9.2.3.23	
Midamble Shift And Burst Type	0		9.2.3.7	

# 9.2.1.47E Neighbouring TDD Cell Measurement Information LCR

This IE provides information on the neighbouring 1.28Mcps TDD cells used for the purpose of measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time Slot LCR* IE and *Midamble Shift LCR* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UC-ld	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time Slot LCR	0		9.2.3.24A	
Midamble Shift LCR	0		9.2.3.7A	

#### 9.2.1.47F NI

The NI IE provides a Notification Indicator determined as specified in [37].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
NI			INTEGER (065535)	

#### 9.2.1.48 Node B Communication Context ID

The Node B Communication Context ID is the identifier of the Communication Context in the Node B, it corresponds to the dedicated resources which are necessary for an UE using one or more dedicated channels in a given Node B.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Node B Communication			INTEGER	"2^20-1" is a reserved value
Context ID			(02^20-1)	indicating all the existing and
				future Node B Communication
				Contexts that can be reached
				by the Communication Control
				Port (All NBCC).

# 9.2.1.49 Payload CRC Presence Indicator

This parameter indicates whether FP payload 16 bit CRC is used or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Payload CRC Presence Indicator			ENUMERATED ( CRC Included, CRC Not Included, )	

#### 9.2.1.49A PICH Power

The *PICH Power* IE indicates a power level relative to the [FDD - Primary CPICH power] [TDD - Primary CCPCH power] configured in a cell. If Transmit Diversity is applied to the PICH (resp. the MICH), the *PICH Power* IE indicates the power offset between the linear sum of the power for the PICH (resp. the MICH) on all branches and the [FDD - Primary CPICH power] [TDD - Primary CCPCH power] configured in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PICH Power			INTEGER (-10+5)	Unit: dB Range: -10 +5 dB
				Step: 1dB

#### 9.2.1.49B Power Local Cell Group ID

The Power Local Cell Group ID represents resources in the Node B which have been pooled from a DL power capability point of view.

	IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Pov	ver Local Cell Group ID			Local Cell ID	
Pov	ver Local Cell Group ID			9.2.1.38	

## 9.2.1.49C Priority Queue ID

The Priority Queue ID provides the identity of the Priority Queue. The Priority Queue ID is unique across all MAC-d flows that are currently allocated for one Node B Communication Context or across all Common MAC flows [FDD - within a cell][1.28Mcps TDD - within a carrier].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Queue ID			INTEGER (07)	

# 9.2.1.49D Process Memory Size

The *Process Memory Size* IE is the size of an HARQ process in the Node B expressed in bits. It provides the maximum number of soft channel bits in the virtual IR buffer [8] or [34].

IE/Group Name	Presence	Range	IE Type and Reference	<b>Semantics Description</b>
Process Memory Size			ENUMERATED (	
			800, 1600, 2400, 3200,	
			4000, 4800, 5600, 6400,	
			7200, 8000, 8800, 9600,	
			10400, 11200, 12000,	
			12800, 13600, 14400,	
			15200, 16000, 17600,	
			19200, 20800, 22400,	
			24000, 25600, 27200,	
			28800, 30400, 32000,	
			36000, 40000, 44000,	
			48000, 52000, 56000,	
			60000, 64000, 68000,	
			72000, 76000, 80000,	
			88000, 96000, 104000,	
			112000, 120000, 128000,	
			136000, 144000, 152000,	
			160000, 176000, 192000,	
			208000, 224000, 240000,	
			256000, 272000, 288000,	
			304000,)	

#### 9.2.1.50 Puncture Limit

The Puncture Limit limits the amount of puncturing that can be applied in order to minimise the number of dedicated physical channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Puncture Limit			INTEGER (015)	Unit: % Range: 40100 % Step: 4 % 100% means no puncturing [FDD - Value "0" is not applicable for E-DPCH.]

## 9.2.1.50A QE-Selector

The QE-Selector indicates from which source the value for the quality estimate (QE) shall be taken.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
QE-Selector			ENUMERATED (	
			Selected,	
			Non-Selected)	

## 9.2.1.51 Report Characteristics

The report characteristics define how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Report Characteristics	М				-	
>On Demand			NULL			
>Periodic			INOLL			
>>Report Periodicity	M		9.2.1.51a	The frequency with which the Node B shall send measurement reports.	-	
>Event A						
>>Measurement Threshold	M		9.2.1.44	The threshold for which the Node B shall trigger a measurement report.	-	
>>Measurement Hysteresis Time	0		9.2.1.41A		-	
>Event B						
>>Measurement Threshold	M		9.2.1.44	The threshold for which the Node B shall trigger a measurement report.	_	
>>Measurement Hysteresis Time	0		9.2.1.41A		_	
>Event C		1	00415			
>>Measurement Increase/Decrease Threshold	M		9.2.1.43		_	
>>Measurement Change Time	М		9.2.1.40B	The time the measurement entity shall rise on (in ms), in order to trigger a measurement report.	-	
>Event D						
>>Measurement Increase/Decrease Threshold	M		9.2.1.43		_	
>>Measurement Change Time	М		9.2.1.40B	The time the measurement entity shall fall (in ms), in order to trigger a measurement report.	-	
>Event E						
>>Measurement Threshold 1	M		Measurement Threshold 9.2.1.44		_	
>>Measurement Threshold 2	0		Measurement Threshold 9.2.1.44		_	
>>Measurement Hysteresis Time	0		9.2.1.41A		_	
>>Report Periodicity	0		9.2.1.51a	The frequency with which the Node B shall send measurement reports.	_	
>Event F						
>>Measurement Threshold 1	M		Measurement Threshold 9.2.1.44			
>>Measurement Threshold 2	0		Measurement Threshold 9.2.1.44		_	
>>Measurement Hysteresis Time	0		9.2.1.41A		-	
>>Report Periodicity	0		9.2.1.51a	The frequency with which the Node B shall send	_	

				measurement reports.		
>Additional Report				See Note 1		
Characteristics						
>>On Modification						
>>>On		1			YES	reject
Modification						-
>>>Measurem	M		9.2.1.44		_	
ent Threshold						

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

# 9.2.1.51a Report Periodicity

The Report Periodicity defines the frequency at which the Node B shall send measurement reports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Report Periodicity	M			
Scale				
>millisecond				
>>Report Periodicity Value	М		INTEGER (16000,)	Unit: ms Range: 1060000 ms Step: 10 ms
>minute				
>>Report Periodicity Value	M		INTEGER (160,)	Unit: min Range: 160 min Step: 1 min

# 9.2.1.51A Requested Data Value

The *Requested Data Value* IE contains the relevant data concerning the ongoing information exchange. The *Requested Data Value* IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DGPS Corrections	0		9.2.1.24B		_	
GPS Navigation Model & Time Recovery	0		9.2.1.31B		-	
GPS Ionospheric	0		9.2.1.31C		_	
Model CDC UTC Madel	0		0.04.04D			
GPS UTC Model GPS Almanac	0		9.2.1.31D 9.2.1.31F			
GPS Real-Time	0		9.2.1.31E			
Integrity						
GPS RX Pos	0	0.4	9.2.1.31G			
GANSS Common Data		01			YES	ignore
>GANSS Ionospheric Model	0		9.2.1.91		-	
>GANSS RX Pos	0		9.2.1.95		_	
>GANSS Additional Ionospheric Model	0		9.2.1.91a		YES	ignore
>GANSS Earth Orientation Parameters	0		9.2.1.107a		YES	ignore
GANSS Generic		0 <max< td=""><td>1</td><td> </td><td>GLOBAL</td><td>ignore</td></max<>	1		GLOBAL	ignore
Data		NoGAN SS>			02027.2	ig.io.c
>GANSS ID	0	001	9.2.1.104		_	
>DGANSS Corrections	0		9.2.1.88		-	
>GANSS Navigation Model And Time Recovery	0		9.2.1.105		-	
>GANSS Time Model	0		9.2.1.96		-	
>GANSS UTC Model	0		9.2.1.97		-	
>GANSS Almanac	0		9.2.1.89		-	
>GANSS Real Time Integrity	0		9.2.1.94		-	
>GANSS Data Bit Assistance	0		9.2.1.103		_	
>GANSS Additional Time Models	0		9.2.1.96a		YES	ignore
>GANSS Additional Navigation Models And Time Recovery	0		9.2.1.105a		YES	ignore
>GANSS Additional UTC Models	0		9.2.1.97a		YES	ignore
>GANSS Auxiliary Information	0		9.2.1.107c		YES	ignore
>SBAS ID	C-GANSS- ID		9.2.1.107b		YES	ignore

Condition	Explanation
GANSS-ID	This IE shall be present if the GANSS ID IE indicates 'SBAS'.

Range Bound	Explanation
maxNoGANSS	Maximum number of GANSS Systems

## 9.2.1.51B Requested Data Value Information

The Requested Data Value Information IE provides information on whether or not the Requested Data Value is available in the message and also the Requested Data Value itself if available. In case of "Periodic" and "On Modification" reporting, "Information Not Available" shall be used when at least one part of the requested information was not available at the moment of initiating the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Availability Indicator	M			
>Information Available				
>>Requested Data Value	M		9.2.1.51A	
>Information Not Available			NULL	

## 9.2.1.52 Resource Operational State

The Resource Operational State is used to indicate the current operational state of the associated resource following a Node B failure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Resource Operational State			ENUMERATED ( Enabled, Disabled)	When a resource is marked as disabled, then its child resources are implicitly disabled. Cell Resource hierarchy can be referred to [6].

# 9.2.1.52A Retention Priority

Void.

#### 9.2.1.52B RLC Mode

The RLC Mode IE indicates the RLC Mode used for a Priority Queue.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RLC Mode			ENUMERATED (	
			RLC-AM, RLC-	
			UM)	

#### 9.2.1.53 RL ID

The RL ID is the unique identifier for one RL associated with a UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL ID			INTEGER (031)	

### 9.2.1.53a RNC-Id

This is the identifier of one RNC in UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-Id			INTEGER (04095)	

# 9.2.1.53b RTWP\* Reporting Indicator

The RTWP\* Reporting Indicator indicates if the RTWP\* measurement value shall be included together with the reported RSEPS measurement value.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RTWP* Indicator			ENUMERATED (	
			RTWP* Reporting	
			Required)	

# 9.2.1.53c RTWP\* for Cell Portion Reporting Indicator

The RTWP\* for Cell Portion Reporting Indicator indicates if the RTWP\* for Cell Portion measurement value shall be included together with the reported RSEPS measurement value.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RTWP* per Cell Portion Indicator			ENUMERATED ( RTWP* for Cell	
			Portion Reporting Required)	

#### 9.2.1.53A SFN

System Frame Number of the cell, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN			INTEGER (04095)	

# 9.2.1.53B Segment Type

Segment type as defined in [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Segment Type			ENUMERATED ( First segment, First segment short, Subsequent segment, Last segment, Last segment short, Complete SIB, Complete SIB short,)	

## 9.2.1.53C SFN-SFN Measurement Threshold Information

The SFN-SFN Measurement Threshold Information defines the related thresholds SFN-SFN Observed Time Difference measurements which shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN-SFN Change Limit	0		INTEGER(1256)	Change of SFN-SFN value compared to previously reported value, which shall trigger a new report. Unit: chip Step: 1/16 chip
Predicted SFN-SFN Deviation Limit	0		INTEGER(1256)	Deviation of the predicated SFN-SFN from the latest measurement result, which shall trigger a new report. Unit: chip Step: 1/16 chip

# 9.2.1.53D SFN-SFN Measurement Time Stamp

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode	M			
>FDD				
>>SFN	М		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>TDD				
>>SFN	М		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>>Time Slot	М		9.2.3.23	Indicates the Time Slot of the reference cell at which this measurement has been performed.

# 9.2.1.53E SFN-SFN Measurement Value Information

The *SFN-SFN Measurement Value Information* IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information		1 <maxno MeasNCell &gt;</maxno 		
>UC-Id	М		9.2.1.65B	
>SFN-SFN Value	М		9.2.1.53F	
>SFN-SFN Quality	0		INTEGER (0255)	Indicates the standard deviation (std) of the SFN-SFN Observed Time Difference measurements in 1/16 chip. SFN-SFN Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported SFN-SFN Value, where x is the reported SFN-SFN Value and $\mu = E[x]$ is the expectation value of x.
>SFN-SFN Drift Rate	М		INTEGER (-100+100)	Indicates the SFN-SFN drift rate in 1/256 chip per second. A positive value indicates that the Reference cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	0		INTEGER (0100)	Indicates the standard deviation (std) of the SFN-SFN drift rate measurements in 1/256 chip per second. SFN-SFN Drift Rate Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported SFN-SFN Drift Rate, where x is the reported SFN-SFN Drift Rate and $\mu = E[x]$ is the expectation value of x.
>SFN-SFN Measurement Time Stamp	М		9.2.1.53D	
Unsuccessful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information		0 <maxno MeasNCell -1&gt;</maxno 		
>UC-Id	М		9.2.1.65B	

Range Bound	Explanation
maxnoMeasNCell	Maximum number of neighbouring cells that can be measured on

# 9.2.1.53F SFN-SFN Value

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode	M			
>FDD				
>>SFN-SFN	М		INTEGER (0614399)	According to mapping in [22].
>TDD				1.28 Mcps and 3.84 Mcps only
>>SFN-SFN	М		INTEGER (040961)	According to mapping in [23].
>TDD 7.68 Mcps				
>>SFN-SFN	М		INTEGER (081923)	According to mapping in [23].

# 9.2.1.53G RL Specific DCH Information

The *RL Specific DCH Information* IE provides RL specific DCH Information for DCHs. In the case of a set of coordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE shall be included only for one of the DCHs in the set of co-ordinated DCHs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
RL Specific DCH Information		1 <maxno ofDCHs&gt;</maxno 			_	
>DCH ID	M		9.2.1.20		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Bearer Not Requested Indicator	0		9.2.2.4G	FDD Only	YES	ignore

Range Bound	Explanation	
maxnoofDCHs	Maximum number of DCHs for one UE	

## 9.2.1.53H Scheduling Priority Indicator

Indicates the relative priority of the HS-DSCH [FDD - or E-DCH data frame]. Used by the Node B when scheduling HS-DSCH[FDD - or E-DCH].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scheduling Priority Indicator			INTEGER (015)	Relative priority of the HS-DSCH [FDD - or E-DCH data frame]:  "0" =Lowest Priority  "15" =Highest Priority

#### 9.2.1.53I SID

The SID IE provides the identity of the Size Index.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SID			INTEGER (07)	

#### 9.2.1.54 SIB Deletion Indicator

Void.

# 9.2.1.55 SIB Originator

Indicates if the Node B shall fill in the SIB information or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIB Originator			ENUMERATED ( Node B, CRNC,)	

## 9.2.1.55A Signalling Bearer Request Indicator

The Signalling Bearer Request Indicator IE indicates if a new signalling bearer needs to be established for the control of Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Signalling Bearer Request			ENUMERATED	
Indicator			(Bearer Requested)	

## 9.2.1.56 Shutdown Timer

The shutdown timer shall indicate the length of time available to the CRNC to perform the block of a resource when a Normal priority block is requested.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Shutdown Timer			INTEGER (13600)	Unit: second

#### 9.2.1.56a T1

The T1 IE is used as described in ref [32] subclause 11.6.2.3.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
T1			ENUMERATED (10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 120, 140, 160, 200, 300, 400,)	Unit: ms Node B may use this value to stop the re-transmission of the corresponding MAC-hs PDU.

## 9.2.1.56A T\_RLFAILURE

The Radio Link Failure procedure shall be triggered after a period of time T\_RLFAILURE has elapsed with a persisting out-of-sync indication (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T_RLFAILURE			INTEGER (0255)	Unit: second
				Range: 0 25.5 s
				Step: 0.1 s

# 9.2.1.56B Start Of Audit Sequence Indicator

Indicates if the AUDIT REQUEST message initiates a new audit sequence or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Start Of Audit Sequence			ENUMERATED (	
Indicator			Start Of Audit	
			Sequence,	
			Not Start Of Audit	
			Sequence)	

# 9.2.1.56C TFCI2 Bearer Request Indicator

Void.

## 9.2.1.57 TFCI Presence

The TFCI Presence parameter indicates whether the TFCI shall be included. [TDD - If it is present in the timeslot, it will be mapped to the channelisation code defined by [19].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI presence			ENUMERATED (	
			Present,	
			Not Present)	

# 9.2.1.58 TFCS (Transport Format Combination Set)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE TFCS Values	M			
>Always Used				This choice is always made.
>>TFCS		1 <maxno ofTFCs&gt;</maxno 		The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on.  [TDD - The first entry (for TFCI 0) should be ignored by the receiver.]
>>>CTFC	M		9.2.1.18A	
>>>CHOICE Gain	C-			
Factors	PhysChan			
>>>Signalled Gain Factors				
>>>>CHOICE Mode	M			
>>>>FDD				
>>>>>Gain Factor β <sub>C</sub>	M		INTEGER (015)	For UL DPCCH or control part of PRACH; mapping in accordance to [9]
>>>>>Gain Factor β <sub>D</sub>	M		INTEGER (015)	For UL DPDCH or data part of PRACH: mapping in accordance to [9]
>>>>TDD				
>>>>Gain Factor β	M		iNTEGER (015)	For UL DPCH in TDD; mapping in accordance to [20].
>>>>Reference TFC	0		INTEGER (03)	If this TFC is a reference TFC, this IE indicates the reference number.
>>>Computed Gain Factors				
>>>>Reference TFC	M		INTEGER (03)	Indicates the reference TFC to be used to calculate the gain factors for this TFC.
>Not Used				This choice shall never be made by the CRNC and the Node B shall consider the procedure as failed if it is received.

Condition	Explanation
PhysChan	The IE shall be present if the TFCS concerns a UL DPCH or PRACH
	channel.

Range Bound	Explanation
maxnoofTFCs	The maximum number of Transport Format Combinations

## 9.2.1.58A TNL QoS

This IE indicates the TNL QoS characteristics of the transport bearer for the uplink data traffic.

When the DS Field IE is used, the value of this IE is configurable by the operator.

When the *Generic Traffic Category* IE is used, generic traffic categories are implementation-specific (e.g. they may be determined by the sender from the application parameters). The value assigned to each of these categories and sent in the *Generic Traffic Category* IE is configurable by the operator, as well as the mapping of this value to DS field [35] at the Node B side.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE TNL QoS type	M			
>DS Field				
>>DS Field	M		BIT STRING (8)	DS Field as defined in [35]. Typically used when the Node B and its CRNC are in the same DS domain as defined in [36].
>Generic Traffic Category				
>>Generic Traffic Category	M		BIT STRING (8)	

# 9.2.1.59 Transport Format Set

The Transport Format Set is defined as the set of Transport Formats associated to a Transport Channel, e.g. DCH.

[TDD - The Transport Format Set for each transport channel within the same CCTrCH shall have the same value for the  $2^{nd}$  Interleaving Mode IE.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dynamic Transport Format Information		1 <maxtf count&gt;</maxtf 		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number of Transport Blocks	M		INTEGER (0512)	
>Transport Block Size	C-Blocks		INTEGER (05000)	Unit: Bits
>CHOICE Mode	M			
>>TDD				
>>>Transmission Time Interval Information	C- TTIdynami c	1 <maxtt Icount&gt;</maxtt 		
>>>>Transmission Time Interval	М		ENUMERATED (10, 20, 40, 80,)	Unit: ms
Semi-Static Transport Format Information		1		
>Transmission Time Interval	М		ENUMERATED (10, 20, 40, 80, dynamic,,5)	Unit: ms; Value "dynamic' for TDD only; Value "5' for LCR TDD only; For FDD DCH, the value "80" is applicable only when <i>DL</i> <i>DPCH Slot Format</i> IE indicates a slot format with SF=512.
>Type Of Channel Coding	М		ENUMERATED ( No codingTDD, Convolutional, Turbo,)	[FDD - The value "No codingTDD" shall be treated as logical error if received]
>Coding Rate	C-Coding		ENUMERATED (1/2, 1/3,)	
>Rate Matching Attribute	М		INTEGER (1maxRM)	
>CRC Size	М		ENUMERATED (0, 8, 12, 16, 24,)	
>CHOICE Mode	М			
>>TDD				
>>>2 <sup>nd</sup> Interleaving Mode	М		ENUMERATED ( Frame related, Timeslot related,)	

Condition	Explanation
Blocks	The IE shall be present if the Number Of Transport Blocks IE is set to
	a value greater than 0.
Coding	The IE shall be present if the Type Of Channel Coding IE is set to
	"Convolutional" or "Turbo".
TTIdynamic	The IE shall be present if the Transmission Time Interval IE in the
-	Semi-Static Transport Format Information IE is set to "dynamic'.

Range Bound	Explanation			
maxTFcount	Maximum number of different Transport Formats that can be included			
	in the Transport Format Set for one transport channel			
maxRM	Maximum number that could be set as rate matching attribute for a			
	transport channel			
maxTTlcount	The amount of different TTIs that are possible for that Transport			
	Format			

#### 9.2.1.60 ToAWE

TOAWE is the window endpoint. DL data frames are expected to be received before this window endpoint. TOAWE is defined with a positive value relative Latest Time of Arrival (LTOA). A data frame arriving after TOAWE gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWE			INTEGER (02559)	Unit: ms

#### 9.2.1.61 ToAWS

TOAWS is the window startpoint. DL data frames are expected to be received after this window startpoint. TOAWS is defined with a positive value relative Time of Arrival Window Endpoint (TOAWE). A data frame arriving before TOAWS gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWS			INTEGER (01279)	Unit: ms

#### 9.2.1.62 Transaction ID

The transaction ID is used to associate all the messages belonging to the same procedure. Messages belonging to the same procedure shall use the same transaction ID.

The transaction ID is determined by the initiating peer of a procedure. For common procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and signalled over the same Node B Control Port. For dedicated procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and initiated towards the same Node B/CRNC context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Transaction ID Length				The Transaction ID shall be interpreted for its integer value, not for the type of encoding ("short" or "long").
>Short				
>>Transaction ID Value	M		INTEGER (0127)	
>Long				
>>Transaction ID Value	M		INTEGER (032767)	

# 9.2.1.62A Transport Bearer Request Indicator

Indicates whether a new transport bearer needs to be established for carrying the concerned transport channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Request Indicator			ENUMERATED ( Bearer Requested, Bearer Not Requested,)	

# 9.2.1.63 Transport Layer Address

In case of transport bearer establishment with ALCAP [2][31], this IE contains the address to be used for Transport Network Control Plane signalling to establish the transport bearer according to [2][31].

In order to allow transport bearer establishment without ALCAP, this IE contains the address of the transport bearer to be used for the user plane transport.

For details on the Transport Address used see ref. [2][31].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Layer Address			BIT STRING (1160,	
			)	

#### 9.2.1.64 TSTD Indicator

Indicates if TSTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSTD Indicator			ENUMERATED (	
			active,	
			inactive)	

# 9.2.1.64A T<sub>UTRAN-GPS</sub> Measurement Value Information

The T<sub>UTRAN-GPS</sub> *Measurement Value Information* IE indicates the measurement results related to the UTRAN GPS Timing of Cell Frames for UE Positioning measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Tutran-gps		1		Indicates the UTRAN GPS Timing of Cell Frames forUE Positioning. According to mapping in [22]. Significant values range from 0 to 37158911999999.
>MS	М		INTEGER (016383)	Most Significant Part
>LS	М		INTEGER (04294967295)	Least Significant Part
Tutran-gps Quality	0		INTEGER (0255)	Indicates the standard deviation (std) of the T <sub>UTRAN-GPS</sub> measurements in 1/16 chip. $T_{UTRAN-GPS}$ Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported T <sub>UTRAN-GPS</sub> Value, where x is the reported T <sub>UTRAN-GPS</sub> Value and $\mu = E[x]$ is the expectation value of x.
T <sub>UTRAN-GPS</sub> Drift Rate	М		INTEGER (-50+50)	Indicates the T <sub>UTRAN-GPS</sub> drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GPS clock.
T <sub>UTRAN-GPS</sub> Drift Rate Quality	0		INTEGER (050)	Indicates the standard deviation (std) of the T <sub>UTRAN-GPS</sub> drift rate measurements in 1/256 chip per second.  T <sub>UTRAN-GPS</sub> Drift Rate Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported T <sub>UTRAN-GPS</sub> Drift Rate, where x is the reported T <sub>UTRAN-GPS</sub> Drift Rate and $\mu = E[x]$ is the expectation value of x.

# 9.2.1.64B T<sub>UTRAN-GPS</sub> Measurement Threshold Information

The  $T_{UTRAN-GPS}$  Measurement Threshold Information defines the related thresholds for UTRAN GPS Timing of Cell Frames for UE Positioning measurements shall trigger the event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T <sub>UTRAN-GPS</sub> Change Limit	0		INTEGER (1256)	Change of T <sub>UTRAN-GPS</sub> value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T <sub>UTRAN-GPS</sub> Deviation Limit	0		INTEGER (1256)	Deviation of the predicated T <sub>UTRAN-GPS</sub> from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

# 9.2.1.64C T<sub>UTRAN-GPS</sub> Accuracy Class

The  $T_{UTRAN-GPS}$  Accuracy Class IE indicates the accuracy class of the UTRAN GPS Timing of Cell Frames for UE Positioning measurement.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
T <sub>UTRAN-GPS</sub> Accuracy Class			ENUMERATED (	More information about Tutran-
			Accuracy Class A,	GPS Measurement Accuracy
			Accuracy Class B,	Class is included in [22] and
			Accuracy Class C,	[23].
			)	

#### 9.2.1.65 UARFCN

Designates the carrier frequency.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UARFCN			INTEGER (016383,)	As defined in subclause 5.4.3 in [14] and [15]

# 9.2.1.65A UL Capacity Credit

The capacity credit indicates to the CRNC the Uplink capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Capacity Credit			INTEGER (065535)	

# 9.2.1.65B UTRAN Cell Identifier (UC-Id)

The UC-Id (UTRAN Cell identifier) is the identifier of a cell in one UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
RNC-ld	M		9.2.1.53a	If the Extended RNC-ID IE is included in the UC- Id IE, the RNC-Id IE shall be ignored.	-	_
C-Id	M		9.2.1.9		-	_
Extended RNC-ID	0		9.2.1.65C	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

## 9.2.1.65C Extended RNC-ID

This is the identifier of one RNC in UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended RNC-ID			INTEGER(409665535)	Note: Application of the Extended RNC-ID IE to very large networks is FFS.

## 9.2.1.66 UL FP Mode

This parameter defines if normal or silent mode of the Frame Protocol shall be used for the UL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL FP Mode			ENUMERATED ( Normal, Silent,	
			)	

#### 9.2.1.67 UL interference level

Void.

#### 9.2.1.67A UL SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL SIR			INTEGER (-82173)	Value = UL SIR/10 Unit: dB Range: -8.2 +17.3 dB Step: 0.1 dB

#### 9.2.1.68 Unidirectional DCH Indicator

The *Unidirectional DCH Indicator* IE indicates that the DCH is unidirectional.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Unidirectional DCH Indicator			ENUMERATED	
			(Downlink DCH only,	
			Uplink DCH only)	

## 9.2.1.69 E-DCH MAC-d Flow Multiplexing List

The E-DCH MAC-d Flow Multiplexing List indicates which E-DCH MAC-d flows are allowed to be multiplexed within a MAC-e/MAC-i PDU with the MAC-d flow it is associated to. If the E-DCH MAC-d Flow Multiplexing List is signalled for an E-DCH MAC-d flow it indicates that E-DCH MAC-d PDUs of this E-DCH MAC-d flow are the first E-DCH MAC-d PDU in the MAC-e/MAC-i PDU. If an E-DCH MAC-d Flow Multiplexing List was already received within a previous Radio Link related procedure and no E-DCH MAC-d Flow Multiplexing List is signalled for an E-DCH MAC-d flow, the Node B shall continue to use the previously received one. If no E-DCH MAC-d Flow Multiplexing List was ever received for an E-DCH MAC-d flow no restrictions shall be assumed for the related E-DCH MAC-d flow for multiplexing E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Multiplexing List			BIT STRING (8)	The first Bit corresponds to E-DCH MAC-d flow 0, the second bit corresponds to E-DCH MAC-d flow 1, etc.  For 1.28Mcps TDD, if the IE is included in the IE Common E-DCH MAC-d Flow Specific Information LCR, the first Bit corresponds to E-DCH MAC-d with the lowest E-DCH MAC-d Flow ID within the same frequency, the second bit corresponds to E-DCH MAC-d flow with the second lowest E-DCH MAC-d Flow ID within the same frequency, etc.

# 9.2.1.70 E-DCH Capability

This parameter defines the E-DCH capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Capability			ENUMERATED (E-	
			DCH Capable, E-	
			DCH non Capable)	

# 9.2.1.71 E-DCH Logical Channel Information

The *E-DCH Logical Channel Information* IE is used for the establishment of E-DCH Logical Channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Logical Channel Information		1 <maxnoofl ogicalchanne ls&gt;</maxnoofl 			-	
>Logical Channel ID	M		9.2.1.80		_	
>Scheduling Priority Indicator	M		9.2.1.53H		-	
>Scheduling Information	M		9.2.1.84		_	
>MAC-es Guaranteed Bit Rate	0		9.2.1.82		-	
>E-DCH DDI Value	M		9.2.1.76	If more than 1 MAC-d PDU size is configured for this Logical Channel, the different sizes will use subsequent DDI values starting from this DDI value. Value '0x3F' is reserved. Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>MAC-d PDU Size List		1 <maxnoof MACdPDUSi ze&gt;</maxnoof 			-	
>>MAC-d PDU Size	М		9.2.1.38A	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.38C		YES	reject
>MAC-es Maximum Bit Rate LCR	0		9.2.3.90	1.28Mcps TDD only	YES	ignore

Range Bound Explanation			
Maxnooflogicalchannels	Maximum number of logical channels		
maxnoofMACdPDUSize	Maximum number of MAC-d PDU size per Logical Channels		

# 9.2.1.72 E-DCH Logical Channel To Modify

The *E-DCH Logical Channel To Modify* IE is used for the reconfiguration of E-DCH Logical Channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Logical Channel Information		1 <maxno oflogicalch annels&gt;</maxno 			_	
>Logical Channel ID	М		9.2.1.80		_	
>Scheduling Priority Indicator	0		9.2.1.53H		_	
>Scheduling Information	0		9.2.1.84		_	
>MAC-es Guaranteed Bit Rate	0		9.2.1.82		_	
>E-DCH DDI Value	0		9.2.1.76	If more than 1 MAC-d PDU size is configured for this Logical Channel, the different sizes will use subsequent DDI values starting from this DDI value. Value '0x3F' is reserved. Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	I.	
>MAC-d PDU Size List		0< maxnoofM ACdPDUS ize			_	
>>MAC-d PDU Size	М		9.2.1.38A	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	_	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.38C		YES	reject
>MAC-es Maximum Bit Rate LCR	0		9.2.3.90	1.28Mcps TDD only	YES	ignore

Range Bound	Explanation
maxnooflogicalchannels	Maximum number of logical channels
maxnoofMACdPDUSize	Maximum number of MAC-d PDU size per Logical Channels

# 9.2.1.73 E-DCH MAC-d Flows To Delete

The *E-DCH MAC-d Flows To Delete* IE is used for the removal of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flows To Delete		1 <maxno ofEDCHM ACdFlows</maxno 		
		>		
>E-DCH MAC-d Flow ID	М		9.2.1.74	

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

#### 9.2.1.74 E-DCH MAC-d Flow ID

The E-DCH MAC-d Flow ID is the unique identifier for one MAC-d flow on E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow ID			INTEGER (0maxnoofEDCHM ACdFlows - 1)	

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

## 9.2.1.74A E-DCH MAC-d PDU Size Capability

This parameter defines the capability for a Local Cell to support different MAC-d PDU Size formats. If this IE is set to "Flexible Size Capable" the Local Cell is "Fixed Size Capable" and "Flexible Size Capable". If not present or set to "Fixed Size Capable" the Local Cell is only "Fixed Size Capable".

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d PDU Size			ENUMERAT	
Capability			ED (Fixed	
			Size	
			Capable,	
			Flexible Size	
			Capable)	

#### 9.2.1.74B E-DCH MAC-d PDU Size Format

The *E-DCH MAC-d PDU Size Format* IE provides information about the type of MAC-d PDU Size Format that shall be used for the E-DCH in the new configuration. "Fixed MAC-d PDU Size" uses MAC-d PDU sizes defined in *MAC-d PDU Size List* IE of the *E-DCH Logical Channel Information* IE. "Flexible MAC-d PDU Size" uses a flexible MAC-d PDU size with a maximum PDU size as defined by *Maximum MAC-d PDU Size Extended* IE of *E-DCH Logical Channel Information* IE. The actual MAC-d PDU size is determined as specified in [24] and [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d PDU Size			ENUMERATED	
Format			(Fixed MAC-d PDU	
			Size, Flexible MAC-d	
			PDU Size)	

#### 9.2.1.75 E-RNTI

The E-RNTI is needed for the UE (or UE group) specific CRC in E-AGCH, see ref. [38].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RNTI			INTEGER (065535)	

#### 9.2.1.76 E-DCH DDI Value

The E-DCH DDI Value is the Data Description Indicator value identifying a unique combination of E-DCH MAC-d Flow ID and MAC-d PDU Size.

Presence	Range	IE Type and Reference	Semantics Description
		INTEGER	
	Presence	Presence Range	Reference

#### 9.2.1.77 E-DCH Provided Bit Rate Value

The E-DCH Provided Bit Rate Value IE indicates the E-DCH Provided Bit Rate as defined in [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Provided Bit Rate			INTEGER	Expressed in bit/s.
Value			(02^24-1,,	
			2^24256,000,000)	

#### 9.2.1.78 E-DCH Provided Bit Rate Value Information

The E-DCH Provided Bit Rate Value Information IE reports the E-DCH Provided Bit Rate Value IE for each priority class.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Provided Bit Rate		1 <maxno< th=""><th></th><th></th></maxno<>		
Value Information		ofPriorityCl		
		asses>		
>Scheduling Priority Indicator	M		9.2.1.53H	
>E-DCH Provided Bit Rate	M		9.2.1.77	
Value				

Range Bound	Explanation
maxNoofPriorityClasses	Maximum number of E-DCH Scheduling Priorities

# 9.2.1.79 E-DCH Processing Overload Level

The *E-DCH Processing Overload Level* IE defines the threshold that determines when the Node B shall indicate processing issue problems to the RNC.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
E-DCH Processing Overload Level			INTEGER (010,)	Number of consecutive TTIs. The value "0" is a special value that means infinity, i.e. when this value is used, the Node B shall never indicate processing issue to the RNC.

# 9.2.1.80 Logical channel ID

The Logical Channel ID IE is used to identify a E-DCH logical channel in Sheduling Information that is sent over Uu.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Logical Channel ID			INTEGER (115)	

#### 9.2.1.81 Maximum Number Of Retransmissions For E-DCH

The *Maximum Number Of Retransmissions For E-DCH* IE specifies the upper boundary for retransmissions for a single MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number Of			INTEGER	
Retransmissions For E-DCH			(015)	

#### 9.2.1.82 MAC-es Guaranteed Bit Rate

The MAC-es Guaranteed Bit Rate IE indicates the guaranteed number of bits per second to be delivered over the air interface under normal operating conditions (provided there is data to deliver) for which the Node B shall provide sufficient UL resources. If the MAC-es Guaranteed Bit Rate IE is received with the value set to 0 during RL set up or modification, no guarantee is applied.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
MAC-es Guaranteed Bit Rate			INTEGER (02^24-	Unit: bit/s
			1,,	
			2^24256,000,000)	

#### 9.2.1.83 MAC-e Reset Indicator

Indicates the MAC-e (or MAC-i) Reset is performed in UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-e Reset Indicator			ENUMERATED (MAC-e Reset)	Means MAC-i Reset in case Maximum MAC-d PDU Size Extended is configured for an E-DCH Logical Channel

## 9.2.1.84 Scheduling Information

The Scheduling Information IE indicates whether the scheduling information is included for the E-DCH logical channel or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scheduling Information			ENUMERATED (	
			Included,	
			Not Included)	

## 9.2.1.85 E-DCH Power Offset for Scheduling Info

The *E-DCH Power Offset for Scheduling Info* is used to calculate the [FDD - E-DPDCH][TDD - E-PUCH] power for transmision of scheduling information without any MAC-d PDUs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Power Offset for			INTEGER (06)	Unit: dB
Scheduling Info				Step: 1 dB

# 9.2.1.86 MBMS Capability

This parameter defines the MBMS capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBMS Capability			ENUMERATED	
			(MBMS Capable,	
			MBMS non Capable)	

# 9.2.1.87 Modulation

Indicates the modulation to be used for a S-CCPCH CCTrCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Modulation			ENUMERATED ( QPSK.	
			16QAM,)	

# 9.2.1.88 DGANSS Corrections

This IE contains DGANSS corrections.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
DGANSS Reference Time	М		INTEGER(0. .3570 by step of 30)	Seconds. Time in GNSS system time (modulo 3600 s) when the DGANSS corrections were calculated
DGANSS Information		1 to <maxsgnt ype&gt;</maxsgnt 		
>GANSS Signal ID	0		9.2.1.106	
>Status/Health	M		ENUMERAT ED(UDRE scale 1.0, UDRE scale 0.75, UDRE scale 0.5, UDRE scale 0.3, UDRE scale 0.2, UDRE scale 0.1, no data, invalid data)	
>DGANSS Signal Information	C- Status/Hea Ith	1 to <maxgan SSSat&gt;</maxgan 		If the Cipher information is included these fields are ciphered.
>>Sat ID	М		INTEGER(0 63)	Defined in [18].
>>IOD	М		BIT STRING(10)	
>>UDRE	M		ENUMERAT ED(UDRE \le 1.0 m, 1.0m < UDRE \le 4.0m, 4.0m < UDRE \le 8.0m, 8.0m < UDRE)	The value in this field shall be multiplied by the UDRE Scale Factor in the IE Status/Health to determine the final UDRE estimate for the particular satellite.
>>PRC	M		INTEGER(- 20472047)	Scaling factor 0.32 meters

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>RRC	М		INTEGER(- 127127)	Scaling factor 0.032 meters/sec

Condition	Explanation
Status/Health	This IE shall be present if the Status/Health IE value
	is not equal to "no data" or "invalid data".

Range Bound	Explanation		
maxGANSSSat	Maximum number of satellites for which data is included in the IE		
maxSgnType	Maximum number of signals for which data is included in the IE		

# 9.2.1.89 GANSS Almanac

This IE contains a reduced-precision subset of the ephemeris and clock correction parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description	Criticality	Assigned Criticality
Week Number	М		INTEGER(02 55)	Almanac reference week , number of weeks since the beginning of GANSS specific system time (mod 256)	-	,
CHOICE Almanac Model	M				_	
>Keplerian Parameters				Model 1	_	
>>T <sub>oa</sub>	M		INTEGER(02 55)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week in GANSS TOD time base	_	
>>IOD <sub>a</sub>	M		INTEGER(03	Issue-Of –Data, common to all satellites	_	
>>Satellite Information KP		1 to <maxga NSSSatA Imanac&gt;</maxga 		Almanacs are in the order of the SV IDs, the smallest ID first.	_	
>>>Sat ID	М		INTEGER(06 3)	Defined in [18].	-	
>>>e	М		BIT STRING(11)	Eccentricity, dimensionless [39]	_	
>>>δi	M		BIT STRING(11)	semi-circles [39]	_	
>>>OMEGADOT	M		BIT STRING(11)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi- circles/sec) [39]	_	
>>>SV Health KP	М		BIT STRING(4)	dimensionless	_	
>>>delta A <sup>1/2</sup>	М		BIT STRING(17)	Semi-Major Axis delta (meters) <sup>1/2</sup> [39]	-	
>>>OMEGA <sub>0</sub>	M		BIT STRING(16)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi- circles) [39]	_	
>>>M <sub>0</sub>	М		BIT STRING(16)	Mean Anomaly at Reference Time (semi- circles) [39]	_	
>>>@	M		BIT STRING(16)	Argument of Perigee (semi-circles) [39]	_	
>>>af <sub>0</sub>	M		BIT STRING(14)	Seconds [39]	_	
>>>af <sub>1</sub>	M		BIT STRING(11)	sec/sec [39]	_	
>NAV Keplerian Parameters				Model 2		
>>Keplerian NAV Almanac	М			47)	YES	ignore
>>>T <sub>oa</sub>	M		INTEGER(02 55)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week in GANSS TOD time base	_	
>>>Satellite information NAV- KP		1 <maxga NSSSatA Imanac&gt;</maxga 			_	
>>>Sat ID	М		INTEGER (063)	Defined in [18].	_	
>>>e	M		BIT STRING(16)	Eccentricity, dimensionless [47]	_	

>>>δi M				
	BIT STRING (16)	Correction to inclination, semi-circles [47]	_	
>>>OMEGADOT M	BIT STRING	Rate of right ascension,	_	
>>>SV Health M	(16) BIT STRING	semi-circles/sec [47] Satellite health [47]	_	
>>>A <sup>1/2</sup> M	(8) BIT STRING	Square root of the semi-	_	
	(24)	major axis, meters <sup>1/2</sup> [47]		
>>>OMEGA <sub>0</sub> M	BIT STRING	Longitude of ascending	_	
	(24)	node of orbit plane at weekly epoch,		
	DIT OTDING	semi-circles [47]		
>>>> M	BIT STRING (24)	Argument of perigee semi-circles [47]	Ι	
>>>M <sub>0</sub> M	BIT STRING (24)	Mean anomaly at reference time	_	
		semi-circles [47]		
>>>af <sub>0</sub> M	BIT STRING (11)	Apparent satellite clock correction	_	
	BIT STRING	seconds [47]		
>>>af <sub>1</sub> M	(11)	Apparent satellite clock correction	_	
>Reduced Keplerian		sec/sec [47] Model 3		
Parameters		Widdel 3		
>>Keplerian Reduced M Almanac			YES	ignore
>>>T <sub>oa</sub> M	INTEGER(02	Scaling factor 2 <sup>12</sup> s Reference time of	_	
	55)	almanac within week in		
>>>Satellite 1		GANSS TOD time base	_	
information RED- <maxga KP NSSSat.</maxga 			_	
Imanac>	•			
>>>Sat ID M	INTEGER (063)	Defined in [18].	_	
>>>>δ <sub>A</sub> M	BIT STRING(8)	meters [43,44,45,47]	_	
$>>>>\Omega_0$ M	BIT STRING	semi-circles	_	
>>>>Φ <sub>0</sub> M	(7) BIT STRING	[43,44,45,47] semi-circles	_	
>>>L1 Health M	(7) BIT STRING	[43,44,45,47]		
	(1)	dimensionless [43,44,45,47]	ı	
>>>L2 Health M	BIT STRING (1)	dimensionless [43,44,45,47]	-	
>>>L5 Health M	BIT STRING	dimensionless	_	
>Midi Keplerian	(1)	[43,44,45,47] Model 4		
Parameters			YES	ignore
	INTEGER/O	Cooling 6-1 012		3
Almanac				
	INTEGER(02 55)	Scaling factor 2 <sup>12</sup> s Reference time of	_	
Almanac		Reference time of almanac within week in	_	
Almanac	55)	Reference time of	_	
Almanac  >>>Toa  M  >>>Satellite information MIDI- KP  Almanac  M  1 <maxga nsssat.<="" td=""><td>55)</td><td>Reference time of almanac within week in</td><td></td><td></td></maxga>	55)	Reference time of almanac within week in		
Almanac  >>>Toa  M  >>>Satellite information MIDI- KP  Almanac  1 <maxga imanac="" nsssat=""></maxga>	55)	Reference time of almanac within week in GANSS TOD time base	-	
Almanac	55) A A A B B B B B B B B B B B B B B B B B	Reference time of almanac within week in GANSS TOD time base  Defined in [18].	-	
Almanac  >>>Toa  M  >>>Satellite information MIDI- KP  Almanac  1 <maxga imanac="" nsssat=""></maxga>	55)	Reference time of almanac within week in GANSS TOD time base	-	

	1	1				
			(11)	[43,44,45,47]		
>>>Ω_dot	М		BIT STRING	semi-circles/sec	_	
>>>sqrtA	M		(11) BIT STRING	[43,44,45,47] meters <sup>1/2</sup> [43,44,45,47]		
>>>sqrtA	IVI		(17)		_	
>>>Ω <sub>0</sub>	M		BIT STRING (16)	semi-circles [43,44,45,47]	_	
>>>>0	М		BIT STRING	semi-circles	_	
			(16)	[43,44,45,47]		
>>>M <sub>0</sub>	М		BIT STRING	semi-circles	_	
			(16)	[43,44,45,47]		
>>>a <sub>fo</sub>	М		BIT STRING (11)	seconds [43,44,45,47]	_	
>>>a <sub>f1</sub>	М		BIT STRING (10)	sec/sec [43,44,45,47]	_	
>>>L1 Health	М		BIT STRING (1)	Dimensionless [43,44,45,47]	_	
>>>L2 Health	М		BIT STRING (1)	dimensionless [43,44,45,47]	_	
>>>L5 Health	М		BIT STRING	dimensionless	_	
			(1)	[43,44,45,47]		
>GLONASS Keplerian Parameters				Model 5		
>>Keplerian GLONASS	М				YES	ignore
>>>Satellite		1			_	
information GLO-		<maxga< td=""><td></td><td></td><td></td><td></td></maxga<>				
KP		NSSSatA				
NA		Imanac>	DIT	d [40]		
>>>N <sup>A</sup>	M		BIT STRING(11)	days [48]	_	
>>>n <sup>A</sup>	M		BIT STRING	dimensionless [48]	_	
			(5)			
>>>H <sub>n</sub> <sup>A</sup>	M		BIT STRING (5)	dimensionless [48]	_	
>>>>\lambda_n^A	М		BIT STRING (21)	semi-circles [48]	_	
>>>t <sub>\(\lambda\)n\(^{A}\)</sub>	М		BIT STRING (21)	seconds [48]	_	
>>>>∆i <sub>n</sub> <sup>A</sup>	М		BIT STRING	semi-circles [48]	_	
>>>ΔT <sub>n</sub> <sup>A</sup>	M		(18) BIT STRING	sec/orbit period [48]	_	
ATT DOT A	N4		(22)	2 - 2 / 2 white 2 - 2 is al <sup>2</sup> [40]		
>>>ΔT_DOT <sub>n</sub> <sup>A</sup>	M		BIT STRING (7)	sec/orbit period <sup>2</sup> [48]	_	
>>>>E <sub>n</sub> A	М		BIT STRING (15)	dimensionless [48]	_	
>>>∞ <sub>n</sub> <sup>A</sup>	М		BIT STRING (16)	semi-circles [48]	-	
>>> \tau_{n}^{A}	М		BIT STRING (10)	seconds [48]	_	
>>>C <sub>n</sub> <sup>A</sup>	М		BIT STRING (1)	dimensionless [48]	_	
>>>>M <sub>n</sub> <sup>A</sup>	0		BIT STRING (2)	dimensionless [48]	_	
>SBAS ECEF			(4)	Model 6		
Parameters >>ECEF SBAS	M				YES	ignore
Almanac >>> <b>Satellite</b>	+	1	1		<del> </del>	
information SBAS- ECEF		1 <maxga NSSSatA Imanac&gt;</maxga 			_	
>>>Data ID	М	2	BIT STRING(2)	Dimensionless [46]	_	
>>>SV ID	M		INTEGER	Defined in [18].	_	
			(063)			

>>>Health	M	BIT STRING	Dimensionless [46]	_	
		(8)			
>>>X <sub>G</sub>	M	BIT STRING	meters [46]	_	
		(15)			
>>>Y <sub>G</sub>	M	BIT STRING	meters [46]	_	
		(15)			
>>>Z <sub>G</sub>	M	BIT STRING	meters [46]	_	
		(9)			
>>>X <sub>G</sub> Rate-of-	M	BIT STRING	meters/sec [46]	_	
Change		(3)			
>>>Y <sub>G</sub> Rate-of-	M	BIT STRING	meters/sec [46]	_	
Change		(3)			
>>>Z <sub>G</sub> Rate-of-	M	BIT STRING	meters/sec [46]	_	
Change		(4)			
>>>t <sub>0</sub>	M	BIT STRING	seconds [46]	_	
		(11)			

Range Bound		Explanation		
	maxGANSSSatAlmanac	Maximum number of satellites for which data is included in the IE		

## 9.2.1.90 GANSS Clock Model

The IE contains fields needed to model the GANSS clock parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
Satellite Clock Model		1 to <maxgan SSClockM od&gt;</maxgan 		Model -1 There may be more than one clock model included if defined in SIS ICD (e.g. two for Galileo)
>t <sub>oc</sub>	M		BIT STRING(14)	defined in [39]
>a <sub>i2</sub>	М		BIT STRING(12)	defined in [39]
>a <sub>i1</sub>	M		BIT STRING(18)	defined in [39]
>a <sub>i0</sub>	M		BIT STRING(28)	defined in [39]
>T <sub>GD</sub>	0		BIT STRING(10)	defined in [39]
>Model ID	0		INTEGER(01,)	Coded as defined in [18].

Range bound	Explanation
maxGANSSClockMod	Maximum number of satellite clock models for which data is included
	in the IE.

## 9.2.1.90a GANSS Additional Clock Models

The IE contains fields needed to model the GANSS clock parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Additional Clock Models				
>NAV-Clock Model				Model-2
>>t <sub>oc</sub>	М		BIT STRING(16)	Time of clock (seconds) [47]
>>af <sub>2</sub>	М		BIT STRING (8)	Clock correction polynomial coefficient (sec/sec²) [47]
>>af <sub>1</sub>	М		BIT STRING (16)	Clock correction polynomial coefficient (sec/sec) [47]
>>af <sub>0</sub>	М		BIT STRING (22)	Clock correction polynomial coefficient (seconds) [47]
>>T <sub>GD</sub>	М		BIT STRING (8)	Group delay (seconds) [47]
>CNAV/CNAV-2 Clock Model				Model-3
>>t <sub>oc</sub>	М		BIT STRING (11)	Clock data reference time of week (seconds) [43, 44, 45, 47]
>>t <sub>op</sub>	М		BIT STRING (11)	Clock data predict time of week (seconds) [43, 44, 45, 47]
>>URA <sub>oc</sub> Index	М		BIT STRING (5)	SV clock accuracy index (dimensionless) [43, 44, 45, 47]
>>URA <sub>oc1</sub> Index	М		BIT STRING (3)	SV clock accuracy change index (dimensionless) [43, 44, 45, 47]
>>URA <sub>oc2</sub> Index	M		BIT STRING (3)	SV clock accuracy change rate index (dimensionless) [43, 44, 45, 47]
>> <b>a</b> f <sub>2</sub> -n	М		BIT STRING (10)	SV clock drift rate correction coefficient (sec/sec²) [43, 44, 45, 47]
>>a <sub>f1-n</sub>	М		BIT STRING (20)	SV clock drift correction coefficient (sec/sec) [43, 44, 45, 47]
>>a <sub>f0-n</sub>	М		BIT STRING (26)	SV clock bias correction coefficient (seconds) [43, 44, 45, 47]
>>T <sub>GD</sub>	М		BIT STRING (13)	Group delay correction (seconds) [43, 44, 45, 47]
>>ISC <sub>L1CP</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) [45, 47]
>>ISC <sub>L1CD</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) [45, 47]
>>ISC <sub>L1C/A</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) [43, 44, 47]
>>ISC <sub>L2C</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) [43, 44, 47]
>>ISC <sub>L515</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) [44, 47]
>>ISC <sub>L5Q5</sub>	0		BIT STRING	Inter signal group delay

IE/Group name	Presence	Range	IE Type and	Semantics description
			Reference (13)	correction (seconds) [44, 47]
>GLONASS Satellite Clock Model				Model-4
$>\tau_n(t_b)$	М		BIT STRING (22)	Satellite clock offset (seconds) [48]
$>\gamma_n(t_b)$	М		BIT STRING (11)	Relative frequency offset from nominal value (dimensionless) [48]
$>\!\!\Delta  au_n$	0		BIT STRING (5)	Time difference between transmission in G2 and G1 (seconds) [48]
>SBAS Satellite Clock Model				Model-5
>t <sub>0</sub>	М		BIT STRING (13)	(seconds) [46]
>a <sub>Gfo</sub>	М		BIT STRING (12)	(seconds) [46]
>a <sub>Gf1</sub>	М		BIT STRING (8)	(sec/sec) [46]

## 9.2.1.91 GANSS Ionospheric Model

The IE contains fields needed to model the propagation delays of the GANSS signals through the ionosphere.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
$a_{i0}$	М		BIT STRING(12)	This parameter is used as defined in [39]
a <sub>i1</sub>	М		BIT STRING(12)	This parameter is used as defined in [39]
a <sub>i2</sub>	М		BIT STRING(12)	This parameter is used as defined in [39]
GANSS Ionosphere Regional Storm Flags		01		
>Storm Flag 1	М		BOOLEAN	This parameter is used as defined in [39]
>Storm Flag 2	М		BOOLEAN	This parameter is used as defined in [39]
>Storm Flag 3	М		BOOLEAN	This parameter is used as defined in [39]
>Storm Flag 4	М		BOOLEAN	This parameter is used as defined in [39]
>Storm Flag 5	М		BOOLEAN	This parameter is used as defined in [39]

## 9.2.1.91a GANSS Additional Ionospheric Model

The IE contains fields needed to model the propagation delays of the GANSS signals through the ionosphere.

IE/Group name	Presence	Range	IE Type and	Semantics description
			Reference	

IE/Group name	Presence	Range	IE Type and	Semantics description
			Reference	
Data ID	M		BIT	Coded as defined in [18]
			STRING(2)	
$\alpha_0$	M		BIT STRING	seconds [47]
			(8)	
$\alpha_1$	M		BIT STRING	sec/semi-circle [47]
			(8)	
$\alpha_2$	M		BIT STRING	sec/(semi-circle) <sup>2</sup> [47]
			(8)	
α <sub>3</sub>	M		BIT STRING	sec/(semi-circle) <sup>3</sup> [47]
			(8)	
$\beta_0$	M		BIT STRING	seconds [47]
			(8)	
$\beta_1$	M		BIT STRING	sec/semi-circle [47]
			(8)	
$\beta_2$	M		BIT STRING	sec/(semi-circle) <sup>2</sup> [47]
			(8)	
$\beta_3$	M		BIT STRING	sec/(semi-circle) <sup>3</sup> [47]
			(8)	

# 9.2.1.92 GANSS Navigation Model

Void.

## 9.2.1.93 GANSS Orbit Model

This IE contains information for GANSS orbit model parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Orbit Model	M			
>Keplerian Parameters				Model-1
>>t <sub>oe</sub>	М		BIT STRING(14)	Time-of-Ephemeris in seconds, scale factor 60 [39]
>>0	М		BIT STRING(32)	Argument of Perigee (semicircles) [39]
>>∆n	M		BIT STRING(16)	Mean Motion Difference From Computed Value (semi- circles/sec) [39]
>>M <sub>0</sub>	M		BIT STRING(32)	Mean Anomaly at Reference Time (semi-circles) [39]
>>OMEGAdot	M		BIT STRING(24)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles/sec) [39]
>>e	М		BIT STRING(32)	Eccentricity, scale factor 2 <sup>-33</sup> [39]
>>ldot	М		BIT STRING(14)	Rate of Inclination Angle (semi-circles/sec) [39]
>>sqrtA	М		BIT STRING(32)	Semi-Major Axis in (meters) <sup>1/2</sup> , scale factor 2 <sup>-19</sup> [39]
>>i <sub>0</sub>	М		BIT STRING(32)	Inclination Angle at Reference Time (semi-circles) [39]
>>OMEGA <sub>0</sub>	M		BIT STRING(32)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles) [39]
>>C <sub>rs</sub>	M		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term to the Orbit Radius (meters) [39]
>>C <sub>is</sub>	М		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term To The Angle Of Inclination (radians) [39]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>C <sub>us</sub>	M		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term To The Argument Of Latitude (radians) [39]
>>C <sub>rc</sub>	M		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term to the Orbit Radius (meters) [39]
>>C <sub>ic</sub>	M		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term To The Angle Of Inclination (radians) [39]
>>C <sub>uc</sub>	М		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term To The Argument Of Latitude (radians) [39]

## 9.2.1.93a GANSS Additional Orbit Models

This IE contains information for GANSS orbit model parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Additional Orbit Models				
>NAV-Keplerian Parameters				Model-2
>>URA Index	М		BIT STRING(4)	SV accuracy (dimensionless) [47]
>>Fit Interval Flag	М		BIT STRING (1)	Fit interval indication (dimensionless) [47]
>>t <sub>oe</sub>	М		BIT STRING(16)	Time of ephemeris (seconds) [47]
>>0	М		BIT STRÌNG (32)	Argument of perigee (semi-circles) [47]
>>Δn	M		BIT STRING (16)	Mean motion difference from computed value (semi-circles/sec) [47]
>>M <sub>0</sub>	М		BIT STRING (32)	Mean anomaly at reference time (semi-circles) [47]
>>OMEGAdot	М		BIT STRING (24)	Rate of right ascension (semi-circles/sec) [47]
>>e	М		BIT STRING (32)	Eccentricity (dimensionless) [47]
>>ldot	М		BIT STRING (14)	Rate of inclination angle (semi-circles/sec) [47]
>>sqrtA	М		BIT STRING (32)	Square root of semi-major axis (meters 1/2) [47]
>>i <sub>0</sub>	М		BIT STRING (32)	Inclination angle at reference time (semi-circles) [47]
>>OMEGA <sub>0</sub>	М		BIT STRING (32)	Longitude of ascending node of orbit plane at weekly epoch (semi-circles) [47]
>>C <sub>rs</sub>	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the orbit radius (meters) [47]
>>C <sub>is</sub>	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the angle of inclination (radians) [47]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>C <sub>us</sub>	М		BIT STRING (16)	Amplitude of sine harmonic correction term to the argument of latitude (radians) [47]
>>Crc	M		BIT STRING (16)	Amplitude of cosine harmonic correction term to the orbit radius (meters) [47]
>>C <sub>ic</sub>	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the angle of inclination (radians) [47]
>>C <sub>uc</sub>	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the argument of latitude (radians) [47]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>CNAV/CNAV-2 Keplerian Parameters				Model-3
>>t <sub>op</sub>	М		BIT STRING (11)	Data predict time of week (seconds) [43,44,45,47]
>>URA <sub>oe</sub> Index	М		BIT STRING (5)	SV accuracy (dimensionless) [43,44,45,47]
>>ΔA	M		BIT STRING (26)	Semi-major axis difference at reference time (meters) [43,44,45,47]
>>A_dot	M		BIT STRING (25)	Chane rate in semi-major axis (meters/sec) [43,44,45,47]
>>∆n <sub>0</sub>	M		BIT STRING (17)	Mean motion difference from computed value at reference time (semi-circles/sec) [43,44,45,47]
>>∆n <sub>0</sub> _dot	M		BIT STRING (23)	Rate of mean motion difference from computed value (semi-circles/sec <sup>2</sup> ) [43,44,45,47]
>>M <sub>0-n</sub>	M		Bit String(33)	Mean anomaly at reference time (semi-circles) [43,44,45,47]
>>e <sub>n</sub>	M		BIT STRING (33)	Eccentricity (dimensionless) [43,44,45,47]
>>\psi_n	М		Bit String(33)	Argument of perigee (semi-circles) [43,44,45,47]
>>Ω <sub>0-n</sub>	M		BIT STRING (33)	Reference right ascension angle (semi-circles) [43,44,45,47]
>>ΔΩ_dot	M		BIT STRING (17)	Rate of right ascension difference (semi-circles/sec) [43,44,45,47]
>>i <sub>o-n</sub>	M		BIT STRING (33)	Inclination angle at reference time (semi-circles) [43,44,45,47]
>>I <sub>0-n</sub> _dot	M		BIT STRING (15)	Rate of inclination angle (semi-circles/sec) [43,44,45,47]
>>C <sub>is-n</sub>	М		BIT STRING (16)	Amplitude of sine harmonic correction term to the angle of inclination (radians) [43,44,45,47]
>>C <sub>ic-n</sub>	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the angle of inclination (radians) [43,44,45,47]
>>C <sub>rs-n</sub>	М		BIT STRING (24)	Amplitude of sine harmonic correction term to the orbit radius (meters) [43,44,45,47]
>>C <sub>rc-n</sub>	M		BIT STRING (24)	Amplitude of cosine harmonic correction term to the orbit radius (meters) [43,44,45,47]
>>C <sub>us-n</sub>	M		BIT STRING (21)	Amplitude of sine harmonic correction term to the argument of latitude (radians) [43,44,45,47]
>>C <sub>uc-n</sub>	M		BIT STRING (21)	Amplitude of cosine harmonic correction term to the argument of latitude (radians) [43,44,45,47]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>GLONASS Earth-Centered, Earth-fixed Parameters				Model-4
>>E <sub>n</sub>	М		BIT STRING (5)	Age of data (days) [48]
>>P1	М		BIT STRING (2)	Time interval between two adjacent values of t <sub>b</sub> (minutes) [48]
>>P2	М		BIT STRING (1)	Change of t₀ flag (dimensionless) [48]
>>M	0		BIT STRING (2)	Type of satellite (dimensionless) [48]
$\Rightarrow x_n(t_b)$	М		BIT STRING (27)	x-coordinate of satellite at time t <sub>b</sub> (kilometers) [48]
$\Rightarrow \dot{x}_n(t_b)$	М		BIT STRING (24)	x-coordinate of satellite velocity at time t <sub>b</sub> (kilometers/sec) [48]
$\Rightarrow \ddot{x}_n(t_b)$	M		BIT STRING (5)	x-coordinate of satellite acceleration at time t <sub>b</sub> (kilometers/sec <sup>2</sup> ) [48]
$\Rightarrow y_n(t_b)$	M		BIT STRING (27)	y-coordinate of satellite at time t <sub>b</sub> (kilometers) [48]
$\Rightarrow \dot{y}_n(t_b)$	M		BIT STRING (24)	y-coordinate of satellite velocity at time t <sub>b</sub> (kilometers/sec) [48]
$\Rightarrow \ddot{y}_n(t_b)$	M		BIT STRING (5)	y-coordinate of satellite acceleration at time t <sub>b</sub> (kilometers/sec <sup>2</sup> ) [48]
$\gg z_n(t_b)$	M		BIT STRING (27)	z-coordinate of satellite at time t <sub>b</sub> (kilometers) [48]
$\Rightarrow \dot{z}_n(t_b)$	М		BIT STRING (24)	z-coordinate of satellite velocity at time t <sub>b</sub> (kilometers/sec) [48]
$\Rightarrow \ddot{z}_n(t_b)$	М		BIT STRING (5)	z-coordinate of satellite acceleration at time t <sub>b</sub> (kilometers/sec <sup>2</sup> ) [48]
>SBAS Earth-Centered, Earth- fixed Parameters				Model-5
>>t <sub>0</sub>	C-ClockMo del		BIT STRING (13)	Time of applicability (seconds) [46]
>>Accuracy	М		BIT STRING (4)	(dimensionless) [46]
>>X <sub>G</sub>	М		BIT STRING (30)	(meters) [46]
>>Y <sub>G</sub>	М		BIT STRING (30)	(meters) [46]
>>Z <sub>G</sub>	M		BIT STRING (25)	(meters) [46]
>>X <sub>G</sub> Rate-of-Change	М		BIT STRING (17)	(meters/sec) [46]
>>Y <sub>G</sub> Rate-of-Change	М		BIT STRING (17)	(meters/sec) [46]
>>Z <sub>G</sub> Rate-of-Change	М		BIT STRING (18)	(meters/sec) [46]
>>X <sub>G</sub> Acceleration	М		BIT STRING (10)	(meters/sec <sup>2</sup> ) [46]
>>Y <sub>G</sub> Acceleration	М		BIT STRING (10)	meters/sec <sup>2</sup> ) [46]
>>Z <sub>G</sub> Acceleration	М		BIT STRING (10)	meters/sec <sup>2</sup> ) [46]

Condition	Explanation
ClockModel	This IE shall be present if 'SBAS Earth-Centered, Earth-fixed Parameters' (Model-5) in IE GANSS Additional Clock Models is not included in GANSS
	Additional Navigation Models IE.

### 9.2.1.94 GANSS Real Time Integrity

This IE contains parameters that describe the real-time status of the GANSS constellation.

IE/Group name	Presence	Range	IE Type and	Semantics description
			Reference	
Satellite Information		1 to		
		<maxgan< td=""><td></td><td></td></maxgan<>		
		SSSat>		
>Bad GANSS Sat ID	M		INTEGER(0.	Defined in [18].
			.63)	
>Bad GANSS Signal ID	0		BIT	Coded as defined in [18].
			STRING(8)	

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE

## 9.2.1.95 GANSS Receiver Geographical Position (GANSS RX Pos)

The GANSS Receiver Geographical Position IE is used to identify the geographical coordinates of a GANSS receiver relevant for a certain Information Exchange Object.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	М		ENUMERATED ( North, South)	
Degrees of Latitude	M		INTEGER (02 <sup>31</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>31</sup> X /90 < N+1 X being the latitude in degree (0° 90°)
Degrees of Longitude	M		INTEGER (-2 <sup>31</sup> 2 <sup>31</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>32</sup> X /360 < N+1 X being the longitude in degree (-180°+180°)
Direction of Altitude	M		ENUMERATED ( Height, Depth)	
Altitude	M		INTEGER (02 <sup>15</sup> -1)	The relation between the value (N) and the altitude (a) in meters it describes is N≤ a <n+1, except="" for="" n="2&lt;sup">15-1 for which the range is extended to include all greater values of (a).</n+1,>

### 9.2.1.96 GANSS Time Model

The *GANSS Time Model* IE contains a set of parameters needed to relate GANSS time to selected time reference indicated by GNSS\_TO\_ID.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GANSS Time Model Reference Time	М		INTEGER(0. . 37799)	GANSS reference time (modulo 1 week) in seconds. The scale factor is 2 <sup>4</sup>
T <sub>A0</sub>	M		INTEGER(- 2147483648. .2147483647	Seconds, scale factor 2 <sup>-35</sup>
T <sub>A1</sub>	0		INTEGER(- 838860883 88607)	sec/sec, scale factor 2 <sup>-51</sup>
T <sub>A2</sub>	0		INTEGER(- 6463)	sec/sec <sup>2</sup> , scale factor 2 <sup>-68</sup>
GNSS_TO_ID	М		ENUMERAT ED(GPS,, Galileo, QZSS, GLONASS)	
Week Number	0		INTEGER(0. .8191)	Reference week of GANSS Time Model

## 9.2.1.96a GANSS Additional Time Models

The GANSS Additional Time Models IE contains a set of parameters needed to relate GANSS time to selected time references.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GNSS-GNSS Time Model		1 <maxga NSS-1&gt;</maxga 		
>GANSS Time Model			9.2.1.96	

Range Bound	Explanation
maxGANSS-1	Maximum number of GANSS systems for which data is included in this IE.

## 9.2.1.97 GANSS UTC Model

The *GANSS UTC Model* IE contains a set of parameters needed to relate GANSS time to Universal Time Coordinate (UTC).

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
A <sub>1</sub>	М		BIT STRING(24)	sec/sec [39]
A <sub>0</sub>	M		BIT STRING(32)	seconds [39]
t <sub>ot</sub>	М		BIT STRING(8)	seconds [39]
WN <sub>t</sub>	М		BIT STRING(8)	weeks [39]
$\Delta t_{LS}$	М		BIT STRING(8)	seconds [39]
WN <sub>LSF</sub>	М		BIT STRING(8)	weeks [39]
DN	М		BIT STRING(8)	days [39]
$\Delta t_{LSF}$	M		BIT STRING(8)	seconds [39]

### 9.2.1.97a GANSS Additional UTC Models

The *GANSS Additional UTC Models* IE contains several sets of parameters needed to relate GANSS time to Universal Time Coordinate (UTC), as defined in [43,44,45,46,47,48].

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Additional UTC Models				
>Model Set 1				
>A <sub>0-n</sub>	M		BIT STRING(16)	Bias coefficient of GNSS time scale relative to UTC time scale (seconds) [43,44,45,47]
>A <sub>1-n</sub>	M		BIT STRING (13)	Drift coefficient of GNSS time scale relative to UTC time scale (sec/sec) [43,44,45,47]
>A <sub>2-n</sub>	M		BIT STRING (7)	Drift rate correction coefficient of GNSS time scale relative to UTC time scale (sec/sec <sup>2</sup> ) [43,44,45,47]
>Δt <sub>LS</sub>	M		BIT STRING (8)	Current or past leap second count (seconds) [43,44,45,47]
>t <sub>ot</sub>	M		BIT STRING (16)	Time data reference time of week (seconds) [43,44,45,47]
>WN <sub>ot</sub>	М		BIT STRING (13)	Time data reference week number (weeks) [43,44,45,47]
>WN <sub>LSF</sub>	M		BIT STRING (8)	Leap second reference week number (weeks) [43,44,45,47]
>DN	M		BIT STRING (4)	Leap second reference day number (days) [43,44,45,47]
$> \Delta t_{LSF}$	M		BIT STRING (8)	Current or future leap second count (seconds) [43,44,45,47]
>Model Set 2				
>N <sup>A</sup>	M		BIT STRING (11)	Callendar day number within four-year period beginning since the leap year (days) [48]
>t <sub>e</sub>	M		BIT STRING (32)	GLONASS time scale correction to UTC(SU) (seconds) [48]
>Delta UT1	0			, -
>>B1	М		BIT STRING (11)	Coefficient to determine ΔUT1 (seconds) [48]
>>B2 >KP	М		BIT STRING (10) BIT STRING	Coefficient to determine ΔUT1 (seconds/msd) [48]  Notification of expected leap
	O		(2)	second correction (dimensionless) [48]
>Model Set 3	N/		BIT STRING	200/200
>A <sub>1WNT</sub>	M		(24) BIT STRING	sec/sec ([46], Message Type 12) seconds
>t <sub>ot</sub>	M		(32) BIT STRING	([46], Message Type 12)
- 101			(8)	([46], Message Type 12)
>WN <sub>t</sub>	М		BIT STRING (8)	weeks ([46], Message Type 12)
>∆t <sub>LS</sub>	М		BIT STRING (8)	seconds ([46], Message Type 12)
>WN <sub>LSF</sub>	M		BIT STRING (8)	weeks ([46], Message Type 12)
>DN	M		BIT STRING (8)	days ([46], Message Type 12)
$> \Delta t_{LSF}$	М		BIT STRING (8)	seconds ([46], Message Type 12)

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>UTC Standard ID	М		BIT STRING (3)	dimensionless Coded as defined in [18]

## 9.2.1.98 T<sub>UTRAN-GANSS</sub> Accuracy Class

The  $T_{UTRAN-GANSS}$  Accuracy Class IE indicates the accuracy class of the UTRAN GANSS Timing of Cell Frames for UE Positioning measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Tutran-ganss Accuracy Class			ENUMERATED ( Accuracy Class A, Accuracy Class B, Accuracy Class C,)	More information about T <sub>UTRAN-GANSS</sub> Measurement Accuracy Class is included in [22] and [23].

## 9.2.1.99 T<sub>UTRAN-GANSS</sub> Measurement Threshold Information

The  $T_{UTRAN-GANSS}$  Measurement Threshold Information IE defines the related thresholds for UTRAN GANSS Timing of Cell Frames for UE Positioning measurements shall trigger the event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T <sub>UTRAN-GANSS</sub> Change Limit	0		INTEGER (1256)	Change of T <sub>UTRAN-GANSS</sub> value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T <sub>UTRAN-GANSS</sub> Deviation Limit	0		INTEGER (1256)	Deviation of the predicated T <sub>UTRAN-GANSS</sub> from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

## 9.2.1.100 T<sub>UTRAN-GANSS</sub> Measurement Value Information

The  $T_{UTRAN-GANSS}$  Measurement Value Information IE indicates the measurement results related to the UTRAN GANSS Timing of Cell Frames for UE Positioning measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
T <sub>UTRAN-GANSS</sub>	M			Indicates the UTRAN GANSS Timing of Cell Frames for UE Positioning. According to mapping in [23]; significant values range from 0 to 371589119999 99.	-	
>MS	М		INTEGER(0 16383)	Most Significant Part	_	
>LS	М		INTEGER(0 42949672 95)	Least Significant Part	-	
Tutran-ganss Quality	0		INTEGER(0 255)	Indicates the standard deviation (std) of the $T_{UTRAN}$ -GANSS measurements in 1/16 chip. $T_{UTRAN}$ -GANSS Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported $T_{UTRAN}$ -GANSS Value, where x is the reported $T_{UTRAN}$ -GANSS Value and $\mu$ = $E[x]$ is the expectation value of x.	_	
T <sub>UTRAN-GANSS</sub> Drift Rate	M		INTEGER(- 5050)	Indicates the Tutran-Ganss drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GANSS clock.	_	
Tutran-ganss Drift Rate Quality	0		INTEGER(050)	Indicates the standard deviation (std) of the $T_{UTRAN}$ - GANSS drift rate measurements in 1/256 chip per second. $T_{UTRAN}$ - GANSS Drift Rate  Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported $T_{UTRAN}$ - GANSS Drift Rate, where x is the reported $T_{UTRAN}$ - GANSS Drift Rate	_	

			and $\mu = E[x]$ is the expectation value of x.		
GANSS Time ID	0	9.2.1.104a	Absence of this IE means Galileo system time.	YES	ignore

## 9.2.1.101 GANSS Reference Time

Void.

# 9.2.1.102 HARQ Memory Partitioning

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Officiality
CHOICE HARQ Memory		1			-	
Partitioning						
>Implicit >>Number of Processes	M		INTEGER	For HARQ		
>>Number of Flocesses	IVI		(18,12,1 4,16)	process IDs going from 0 to "Number of Processes" – 1 the Total number of soft channel bits [33] is partitioned equally between all HARQ processes according to the rules in [18].		
>Explicit				raico in [10]i		
>>HARQ Memory Partitioning Infomation		1 <maxno ofHARQpr ocesses&gt;</maxno 		The first instance of the parameter corresponds to HARQ process with identifier 0, the second instance to HARQ process with identifier 1, and so on.	_	
>>>Process Memory Size	M		9.2.1.49D	See [18]	_	
>>HARQ Memory Partitioning Information Extension For MIMO		0, 4, 6 or 8		For FDD and 1.28Mcps TDD only The 1 <sup>st</sup> instance corresponds to HARQ process with identifier set to 'maxnoofHARQpr ocesses', the 2 <sup>nd</sup> instance to HARQ process with identifier set to 'maxnoofHARQpr ocesses+1', and so on.	GLOBAL	ignore
>>>Process Memory Size	М		9.2.1.49D	See [18]	_	

Range Bound	Explanation
MaxnoofHARQprocesses	Maximum number of HARQ processes for one UE [FDD and
	1.28Mcps TDD- per stream (the maximum number of HARQ processes per UE is 2 * MaxnoofHARQprocesses in dual stream transmission mode)]

### 9.2.1.103 GANSS Data Bit Assistance

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS TOD	M		INTEGER(059,)	Reference time (modulo 1 minute) of the first bit of the data in <i>Data Bits</i> IE, in seconds.
Data Bit Assistance		1 <maxgans< td=""><td></td><td></td></maxgans<>		
List		SSat>		
>Sat ID	M		INTEGER(063)	Defined in [18].
>Data Bit Assistance		1 <maxsgnty< td=""><td></td><td></td></maxsgnty<>		
Sgn List		pe>		
>>GANSS Signal ID	M		9.2.1.106	
>>Data Bits	М		BIT STRING(11024)	Raw data bits as transmitted from a specific satellite at the time indicated by GANSS_TOD. See [18].

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE
maxSgnType	Maximum number of GANSS signals included in the IE

### 9.2.1.104 GANSS ID

This IE defines a particular GANSS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS ID	М		INTEGER(07 ,)	Defines the GANSS and is coded as defined in [18].

## 9.2.1.104a GANSS Time ID

This IE defines a particular GANSS system time.

IE/Group N	ame Presence	Range	IE Type and Reference	Semantics Description
GANSS Time ID	М		INTEGER(07	Defines the GANSS system time for the UTRAN GANSS Timing of Cell Frames for UE Positioning. Coded as defined in [18],
				Coded as defined in [18], subclause 10.3.7.93a.

## 9.2.1.105 GANSS Navigation Model And Time Recovery

This IE contain information required to manage the transfer of precise navigation data to the GANSS-capable UE.

IE/Group name	Presence	Range	IE Type and	Semantics description
-			Reference	•

GANSS Transmission Time	M		9.2.1.107	GANSS Time when the Navigation model has been retrieved
Non-Broadcast Indication	0		ENUMERAT ED(true)	If this IE is present, GANSS navigation model is not derived from satellite broadcast. See NOTE 1
Satellite Information		1 to <maxgan SSSat&gt;</maxgan 		
>Sat ID	M		INTEGER(063)	Defined in [18].
>SV Health	M		BIT STRING(5)	Coded as defined in [39]
>IOD	M		BIT STRING(10)	
>GANSS Clock Model	M		9.2.1.90	
>GANSS Orbit Model	М		9.2.1.93	

NOTE 1: The Non-Broadcast Indication allows to inform that the navigation model is not bit-to-bit the one broadcast by the satellite. If it is set to 1, the UE is informed that techniques such as data wiping off applied to the navigation model may not work for instance.

Condition	Explanation	
Orbit model	The IE shall be present if the GANSS Orbit Model IE	
	indicates 'Keplerian Parameters'.	

Range bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE.

## 9.2.1.105a GANSS Additional Navigation Models And Time Recovery

This IE contain information required to manage the transfer of precise navigation data to the GANSS-capable UE.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GANSS Transmission Time	М		9.2.1.107	GANSS Time when the Navigation model has been retrieved
Non-Broadcast Indication	0		ENUMERAT ED(true)	If this IE is present, GANSS navigation model is not derived from satellite broadcast. See NOTE 1 in 9.2.1.105.
Satellite Information		1 <maxga NSSSat&gt;</maxga 		
>Sat ID	M		INTEGER(063)	Defined in [18].
>SV Health	M		BIT STRING(6)	Coded as defined in [18].
>IOD	M		BIT STRING(11)	Coded as defined in [18].
>GANSS Additional Clock Models	М		GANSS Addtional Clock Models 9.2.1.90a	
>GANSS Additional Orbit Models	M		GANSS Additional Orbit Models 9.2.1.93a	

Range bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in this IE.
	The value of maxGANSSSat is 64

## 9.2.1.106 GANSS Signal ID

This IE defines a specific signal within a particular GANSS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Signal ID	M		INTEGER(07,)	Coded as defined in [18].

### 9.2.1.107 GANSS Transmission Time

This IE indicates the GANSS Transmission Time

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GANSS Day	0		INTEGER(0 8191)	The sequential number of days from the origin of the GNSS system time (indicated by the GANSS_ID given in the Requested Data Value IE) modulo 8192 days (about 22 years).
GANSS TOD	М		INTEGER(0 86399)	GANSS Time of Day in seconds

## 9.2.1.107a GANSS Earth Orientation Parameters

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
t <sub>EOP</sub>	М		BIT STRING(16)	EOP data reference time (seconds) [43]
PM_X	М		BIT STRING (21)	X-axis polar motion value at reference time  (arc-seconds) [43]
PM_X_dot	M		BIT STRING (15)	X-axis polar motion drift at reference time  (arc-seconds/day) [43]
PM_Y	M		BIT STRING (21)	Y-axis polar motion value at reference time (arc-seconds) [43]
PM_Y_dot	M		BIT STRING (15)	Y-axis polar motion drift at reference time  (arc-seconds/day) [43]
ΔUT1	М		BIT STRING (31)	UT1-UTC difference at reference time (seconds) [43]
ΔUT1_dot	M		BIT STRING (19)	Rate of UT1-UTC difference at reference time (seconds/day) [43]

### 9.2.1.107b SBAS ID

This IE defines a specific SBAS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SBAS ID	M		ENUMERATED( WAAS, EGNOS, MSAS, GAGAN,)	

## 9.2.1.107c GANSS Auxiliary Information

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE GANSS-ID				
>GANSS-ID-1				This choice may only be present if GANSS ID indicated 'Modernized GPS'
>>Aux Info List		1 <maxgan SSSat&gt;</maxgan 		
>>>Sat ID	M		INTEGER(063)	Defined in [18].
>>>Signals Available	M		BIT STRING(8)	Coded as defined in [18].
>GANSS-ID-3				This choice may be present if GANSS ID indicated 'GLONASS'
>>Aux Info List		1 <maxgan SSSat&gt;</maxgan 		
>>>Sat ID	M		INTEGER(063)	Defined in [18].
>>>Signals Available	M		BIT STRING(8)	Coded as defined in [18].
>>>Channel Number	М		INTEGER (-713)	This field indicates the GLONASS carrier frequency number of the satellite identified by <i>Sat ID</i> , as defined in [48].

Range Bound	Explanation
maxGANSSSat	Maximum number of GANSS satellites for which data is included in this IE.

## 9.2.1.107d Additional Ionospheric Model Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional Ionospheric Model Request	M		BIT STRING(2)	Data ID for GANSS Additional lonospheric Model as defined in [18], subclause 10.3.7.92b.

## 9.2.1.107e Earth Orientation Parameters Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Earth Orientation Parameters Request	М		BOOLEAN	True means requested.

## 9.2.1.107f GANSS Additional Navigation Models And Time Recovery Request

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
GANSS Additional	M		BOOLEAN	True means requested.
Navigation Models And Time				
Recovery Request				

## 9.2.1.107g GANSS Additional UTC Models Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Additional UTC Models Request	М		BOOLEAN	True means requested.

### 9.2.1.107h GANSS Auxiliary Information Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Auxiliary Information Request	M		BOOLEAN	True means requested.

#### 9.2.1.108 IP Multicast Indication

The *IP Multicast Indication* IE indicates the IP multicast group information dedicated to an MBMS service and the CFN Offset, defined as the offset between MFN and CFN for a FACH. When Node B receives such an indication, if supported, it may join the corresponding IP multicast group. When Node B receives data frame from this IP multicast group, it shall consider the value of the CFN field in the data frame as MFN and calculate the actual CFN for the concerned FACH according to following equation:

 $CFN = (MFN - CFN Offset) \mod 256.$ 

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Layer Address	M		9.2.1.63	An MBMS service corresponds to a dedicated IP multicast address.
Binding ID	М		9.2.1.4	Indicating multicast port.
CFN Offset	M		INTEGER (0255)	

### 9.2.1.109 IP Multicast Data Bearer Indication

The *IP Multicast Data Bearer Indication* IE indicates whether the Node B is ready for receiving concerned MBMS service data through IP multicast transport bearer.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP Multicast Data Bearer Indication			BOOLEAN	True: IP multicast data bearer is used. False: IP multicast data bearer is not used.

## 9.2.1.110 SixtyfourQAM DL Capability

This parameter defines the SixtyfourQAM downlink capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
SixtyfourQAM DL Capability			ENUMERATED	
			(SixtyfourQAM DL	
			Capable,	
			SixtyfourQAM DL	
			Non-Capable)	

### 9.2.1.111 FACH Measurement Occasion Cycle Length Coefficient

The FACH Measurement Occasion Cycle Length Coefficient IE provides information used for MAC-hs scheduling decision for MAC-c PDU in Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FACH Measurement Occasion Cycle Length Coefficient			INTEGER (112)	

### 9.2.1.112 MAC-ehs Reset Timer

The MAC-ehs Reset Timer IE is used as Reset Timer(Treset) described in ref [32] subclause 11.6.4.5.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-ehs Reset Timer			ENUMERATED (1, 2, 3, 4,)	Timer in multiples of T1 values (milliseconds). Used when MAC-ehs reordering queue is reset in CELL_FACH and CELL_PCH

### 9.2.1.113 Paging MAC Flow ID

Paging MAC Flow ID is the unique identifier for one Paging MAC flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flow ID			INTEGER (03)	

## 9.2.1.114 Enhanced FACH Capability

This parameter defines the Enhanced FACH capability for a Local Cell. [1.28Mcps TDD - This parameter defines the Enhanced FACH capability for both uplink and downlink]

IE/Group Name	Presen	Range	IE Type and	Semantics Description
	ce		Reference	
Enhanced FACH Capability			ENUMERATED	
			(Enhanced FACH	
			Capable, Enhanced	
			FACH Non-Capable)	

## 9.2.1.115 Enhanced PCH Capability

This parameter defines the Enhanced PCH capability for a Local Cell.

IE/Group Name	Presen	Range	IE Type and	Semantics Description

	ce	Reference	
Enhanced PCH Capability		ENUMERATED (Enhanced PCH Capable, Enhanced PCH Non-Capable)	

## 9.2.1.116 Enhanced UE DRX Capability

This parameter defines the Enhanced UE DRX capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced UE DRX Capability			ENUMERATED (Enhanced UE DRX Capable, Enhanced UE DRX non Capable)	

## 9.2.1.117 Priority Queue Information for Enhanced FACH/PCH

The *Priority Queue Information for Enhanced FACH/PCH* IE provides information associated to HSDPA Priority Queue used for Enhanced FACH and/or Enhanced PCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Queue ID	M		9.2.1.49C	
Scheduling Priority Indicator	M		9.2.1.53H	
T1	M		9.2.1.56a	
MAC-ehs Reset Timer	M		9.2.1.112	
Discard Timer	0		9.2.1.24E	Shall be ignored in case of Enhanced PCH
MAC-hs Window Size	M		9.2.1.38B	
Maximum MAC-c PDU Size	M		MAC PDU Size	
			Extended	
			9.2.1.38C	

## 9.2.1.118 MIMO Capability

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Capability			ENUMERATED	
			(MIMO Capable,	
			MIMO Non-Capable)	

### 9.2.1.119 MIMO Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Activation Indicator	M		NULL	

#### 9.2.1.120 MIMO Mode Indicator

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
MIMO Mode Indicator			ENUMERATED	
			(Activate,	
			Deactivate)	

## 9.2.1.121 SixtyfourQAM DL and MIMO Combined Capability

This parameter defines the SixtyfourQAM downlink and MIMO combined capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixtyfourQAM DL and MIMO Combined Capability			ENUMERATED (SixtyfourQAM DL and MIMO Combined Capable, SixtyfourQAM DL and MIMO Combined Non- Capable)	

### 9.2.1.122 DL RLC PDU Size Format

The DL RLC PDU Size Format IE indicates the downlink RLC PDU size format used for a Priority Queue.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL RLC PDU Size Format			ENUMERATED (	
			Fixed RLC PDU	
			size, Flexible RLC	
			PDU size ,)	

## 9.2.2 FDD specific parameters

### 9.2.2.a ACK-NACK Repetition Factor

The ACK-NACK Repetiton Factor IE indicates the number of consecutive repetitions of the ACK and NACK.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ACK-NACK Repetition Factor			INTEGER (14,)	Step: 1

#### 9.2.2.b ACK Power Offset

The ACK Power Offset IE indicates Power offset used in the UL between the HS-DPCCH slot carrying HARQ ACK information and the associated DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ACK Power Offset			INTEGER (08,)	According to mapping in ref. [9] subclause 4.2.1.

## 9.2.2.A Active Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence activation. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CM Configuration Change CFN	M		CFN 9.2.1.7	
Transmission Gap Pattern Sequence Status		0 <maxt GPS&gt;</maxt 		
>TGPS Identifier	M		INTEGER (1maxTGPS)	If the group is not present, none of the pattern sequences are activated. References an already defined sequence.
>TGPRC	М		INTEGER (0511)	The number of transmission gap patterns within the Transmission Gap Pattern Sequence. "0"=Infinity
>TGCFN	М		CFN 9.2.1.7	Connection Frame Number of the first frame of the first pattern 1 within the Transmission Gap Pattern Sequence.

Range Bound	Explanation
maxTGPS	Maximum number of active pattern sequences. Value 6.

## 9.2.2.B Adjustment Period

The Adjustment Period IE defines the period to be used for power balancing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Period			INTEGER (1256)	Unit: Frames

## 9.2.2.C Adjustment Ratio

The Adjustment Ratio IE (Radj) defines the convergence rate used for the associated Adjustment Period.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Ratio			INTEGER (0100)	Unit: None
				Range: 01
				Step: 0.01

#### 9.2.2.D AICH Power

The AICH Power IE indicates a power level (measured as the power per transmitted acquisition indicator when several AIs are transmitted in parallel) relative to the primary CPICH power configured in a cell. If Transmit Diversity is applied to the AICH, the AICH Power IE indicates the power offset between the linear sum of the power for the AICH on all branches and the Primary CPICH power configured in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Power			INTEGER (-22+5)	Unit: dB
				Range: -22 +5 dB
				Step: 1 dB

## 9.2.2.1 AICH Transmission Timing

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Transmission Timing			ENUMERATED	See parameter
			(0, 1)	AICH_Transmission_Timing in
				ref. [7].

### 9.2.2.1A AP Preamble Signature

Void.

### 9.2.2.1B AP Sub Channel Number

Void.

#### 9.2.2.1Ba Best Cell Portions

Best Cell Portions IE indicates the best received cell portions and their SIR values when Cell Portions are defined in the cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Best Cell Portions		1 <maxno< th=""><th></th><th></th></maxno<>		
		ofBestCell		
		Portions>		
>Cell Portion ID	M		9.2.2.1Ca	
>SIR Value	M		INTEGER (063)	According to mapping in [22]
				and [23]

Range Bound	Explanation
maxnoofBestCellPortions	Maximum number of reported Best Received Cell Portions

## 9.2.2.1Bb Bundling Mode Indicator

The Bundling Mode Indicator indicates whether the bundling shall be done or shall not be done for Iub.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Bundling Mode Indicator			ENUMERATED (	The value "Bundling" is
			Bundling, No	applicable only when E-TTI
			bundling)	indicates "2ms".

## 9.2.2.1C CD Sub Channel Numbers

Void.

### 9.2.2.1Ca Cell Portion ID

Cell Portion ID is the unique identifier for a cell portion within a cell. See [4].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Portion ID			INTEGER (063,)	

## 9.2.2.1D Channel Assignment Indication

Void.

### 9.2.2.2 Chip Offset

The Chip Offset is defined as the radio timing offset inside a radio frame. The Chip offset is used as offset relative to the Primary CPICH timing for the DL DPCH or for the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Chip Offset			INTEGER (038399)	Unit: chips

## 9.2.2.2A Closed Loop Timing Adjustment Mode

Indicates when the phase/amplitude adjustment is performed in the DL in relation to the receipt of the UL feedback command in case of closed loop mode transmit diversity on DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Closed Loop Timing			ENUMERATED (	According to ref. [10]
Adjustment Mode			Offset1,	subclause 7.1:
			Offset2,	"Offset1" = slot(j+1)mod15
			)	"Offset2" = slot(j+2)mod15

### 9.2.2.3 Common Channels Capacity Consumption Law

Void.

### 9.2.2.3A Compressed Mode Deactivation Flag

The Compressed Mode Deactivation Flag indicates whether Compressed Mode shall be deactivated or not in the new RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Compressed Mode			ENUMERATED (	
Deactivation Flag			Deactivate,	
			Maintain Active)	

9.2.2.4 Compressed Mode Method

Void.

9.2.2.4A CPCH Allowed Total Rate

Void.

9.2.2.4B CPCH Scrambling Code Number

Void.

9.2.2.4C CPCH UL DPCCH Slot Format

Void.

### 9.2.2.4Ca CQI Power Offset

The *CQI Power Offset* IE indicates Power offset used in the UL between the HS-DPCCH slots carrying CQI information and the associated DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CQI Power Offset			INTEGER (08,)	According to mapping in ref. [9] subclause 4.2.1.

### 9.2.2.4Cb CQI Repetition Factor

The CQI Repetiton Factor IE indicates the number of consecutive repetitions of the CQI.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CQI Repetition Factor			INTEGER (14,)	Step: 1

### 9.2.2.4D DCH FDD Information

The  $DCH\ FDD\ Information$  IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCH FDD Information		1 <maxno ofDCHs&gt;</maxno 			_	
>Payload CRC Presence Indicator	M		9.2.1.49		_	
>UL FP Mode	М		9.2.1.66		_	
>ToAWS	М		9.2.1.61		_	
>ToAWE	М		9.2.1.60		_	
>DCH Specific Info		1 <maxno ofDCHs&gt;</maxno 			_	
>>DCH ID	M		9.2.1.20		_	
>>Transport Format Set	M		9.2.1.59	For UL	_	
>>Transport Format Set	М		9.2.1.59	For DL	_	
>>Allocation/Retention Priority	М		9.2.1.1A		_	
>>Frame Handling Priority	М		9.2.1.30		-	
>>QE-Selector	М		9.2.1.50A		_	
>>Unidirectional DCH Indicator	0		9.2.1.68		YES	reject
>TNL QoS	0		9.2.1.58A		YES	ignore

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for one UE

## 9.2.2.4E DCHs FDD To Modify

The DCHs FDD To Modify IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCHs FDD To Modify		1 <maxno ofDCHs&gt;</maxno 			-	
>UL FP Mode	0		9.2.1.66		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>DCH Specific Info		1 <maxno ofDCHs&gt;</maxno 			_	
>>DCH ID	М		9.2.1.20		_	
>>Transport Format Set	0		9.2.1.59	For the UL.	_	
>>Transport Format Set	0		9.2.1.59	For the DL.	_	
>>Allocation/Retention Priority	0		9.2.1.1A		1	
>>Frame Handling Priority	0		9.2.1.30		_	
>>Unidirectional DCH Indicator	0		9.2.1.68		YES	reject
>TNL QoS	0		9.2.1.58A		YES	ignore

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for one UE

### 9.2.2.4F DCH Indicator For E-DCH-HSDPA Operation

The DCH Indicator For E-DCH-HSDPA Operation parameter indicates whether *DCH Information* IE should be ignored in the message in which the *DCH Indicator For E-DCH-HSDPA Operation* IE is included.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCH Indicator For E-DCH-			ENUMERATED	
HSDPA Operation			(DCH not present)	

## 9.2.2.4G Transport Bearer Not Requested Indicator

The Transport Bearer Not Requested Indicator parameter indicates that a transport bearer shall not be established or may not to be established for a DCH or an E-DCH MAC-d flow.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Transport Bearer Not			ENUMERATED	
Requested Indicator			(Transport Bearer	
			shall not be	
			Established,	
			Transport Bearer	
			may not be	
			Established)	

## 9.2.2.4H Transport Bearer Not Setup Indicator

The Transport Bearer Not Setup Indicator parameter indicates that a transport bearer will not be established for a DCH or an E-DCH MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Not Setup			ENUMERATED	
Indicator			(Transport Bearer	
			Not Setup)	

9.2.2.5 D-Field Length

Void.

9.2.2.6 Dedicated Channels Capacity Consumption Law

Void.

9.2.2.7 Diversity Control Field

Void.

9.2.2.8 Diversity Indication

Void.

### 9.2.2.9 Diversity Mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Mode			ENUMERATED ( None, STTD, Closed loop mode 1, Not Used,)	The <i>Diversity Mode</i> IE shall never be set to "Not Used". If received it shall be rejected.

### 9.2.2.10 DL DPCH Slot Format

Indicates the slot format used in DPCH in DL, accordingly to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Slot Format			INTEGER (016,)	

## 9.2.2.10A DL DPCH Timing Adjustment

The DL DPCH Timing Adjustment indicates that a timing adjustment of the related radio link is required or that an Initial DL DPCH Timing Adjustment has been performed by the Node B. It also indicates whether the timing adjustment consists of a timing advance or a timing delay with respect to the SFN timing. The adjustment always consists of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Timing Adjustment			ENUMERATED (	The size of the timing
			timing advance,	adjustment is 256 chips.
			timing delay)	

## 9.2.2.11 DL frame type

Void.

## 9.2.2.12 DL or Global Capacity Credit

Void.

## 9.2.2.12A DL\_power\_averaging\_window\_size

The *DL\_power\_averaging\_window\_size* IE defines the window size when Limited Power Increase is used [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL_power_averaging_window			INTEGER (160)	Unit: inner loop power
_size				adjustments
				Range: 160
				Step: 1 adjustment

## 9.2.2.12B DL Power Balancing Information

The *DL Power Balancing Information* IE provides information for power balancing to be activated in the relevant RL(s).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Adjustment Type	M		9.2.2.27	
DL Reference Power	C-		DL Power	Power on DPCH or on F-
	Common		9.2.1.21	DPCH
DL Reference Power	C-	1 <maxno< td=""><td></td><td></td></maxno<>		
Information	Individual	ofRLs>		
>RL ID	M		9.2.1.53	
>DL Reference Power	М		DL Power	Power on DPCH or on F-
			9.2.1.21	DPCH
Max Adjustment Step	C-		9.2.2.20	
	CommonO			
	rIndividual			
Adjustment Period	C-		9.2.2.B	
	CommonO			
	rIndividual			
Adjustment Ratio	C-		9.2.2.C	
	CommonO			
	rIndividual			

Condition	Explanation
Common	The IE shall be present if the Power Adjustment Type IE is set to
	"Common".
Individual	The IE shall be present if the Power Adjustment Type IE is set to
	"Individual".
CommonOrIndividual	The IE shall be present if the Power Adjustment Type IE is set to
	"Common" or 'Individual".

Range Bound	Explanation
maxnoofRLs	Maximum number of Radio Links for a UE

## 9.2.2.12C DL Power Balancing Activation Indicator

The DL Power Balancing Activation Indicator IE indicates that the power balancing is activated in the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power Balancing Activation			ENUMERATED	
Indicator			(DL Power	
			Balancing Activated)	

### 9.2.2.12D DL Power Balancing Updated Indicator

The *DL Power Balancing Updated Indicator* IE indicates that the power balancing related parameters is updated in the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power Balancing Updated			ENUMERATED (DL	
Indicator			Power Balancing	
			Updated)	

## 9.2.2.13 DL Scrambling Code

DL scrambling code to be used by the RL. One cell may have multiple DL scrambling codes available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code			INTEGER (015)	"0" = Primary scrambling code of the cell "1""15" = Secondary scrambling code

### 9.2.2.13A DL TPC Pattern 01 Count

The *DL TPC Pattern 01 Count* IE contains the value of the parameter n, which is used for determining the DL TPC pattern on Radio Links marked with "first RLS" by the *First RLS indicator* IE before UL synchronisation is achieved.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL TPC Pattern 01 Count			INTEGER(030,)	

#### 9.2.2.13B DSCH FDD Information

Void.

### 9.2.2.13C DPC Mode

The DPC Mode IE indicates the DPC mode to be applied [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPC Mode			ENUMERATED ( Mode0, Mode1, )	"Mode0": The Node B shall estimate the UE transmitted TPC command and update the DL power in every slot
				"Mode1": The Node B shall estimate the UE transmitted TPC command over three slots and shall update the DL power in every three slots

### 9.2.2.13D DSCH FDD Common Information

Void.

### 9.2.2.13Da E-DCH FDD Information

The E-DCH FDD Information IE provides information for an E-DCH to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flows Information	М		9.2.2.13M		1	-
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn	If this IE is not included, scheduled transmission in all HARQ processes is allowed.	I	
E-DCH Maximum Bitrate	0		9.2.2.13T		ı	
E-DCH Processing Overload Level	0		9.2.1.79		-	
E-DCH Reference Power Offset	0		9.2.2.13Y			
E-DCH Power Offset for Scheduling Info	0		9.2.1.85		YES	ignore
SixteenQAM UL Operation Indicator	0		9.2.2.88A		YES	reject
E-AGCH Table Choice	C- SixteenQA M UL Operation		9.2.2.100	If the SixteenQAM UL operation is not configured for this UE, Table 16B for E-AGCH in [8] shall be used.	YES	ignore

Condition	Explanation
SixteenQAM UL Operation	The IE shall be present if the SixteenQAM UL Operation Indicator IE is
	set to 'Activate'.

## 9.2.2.13DA E-DCH FDD Update Information

The *E-DCH FDD Update Information* IE provides information for E-DCH to be updated. At least one IE shall be present.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Update Information		0 <max noofED CHMAC dFlows&gt;</max 			-	
>E-DCH MAC-d Flow ID	М		9.2.1.74		_	
>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		-	
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		-	
E-DCH DL Control Channel Change Information		0 <max noofED CHRLs &gt;</max 			GLOBAL	Ignore
>E-DCH RL ID	М		RL ID 9.2.1.53		Ι	

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of MAC-d flows.
maxnoofEDCHRLs	Maximum number of E-DCH RLs for one UE

## 9.2.2.13Db E-DCH FDD Information Response

The *E-DCH FDD Information Response* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information Response		0 <max noofED CHMAC dFlows&gt;</max 			_	
>E-DCH MAC-d Flow ID	M		9.2.1.74		_	
>Binding ID	0		9.2.1.4		_	
>Transport Layer Address	0		9.2.1.63		_	
>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		_	
>Transport Bearer Not Setup Indicator	0		9.2.2.4H		YES	ignore
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		_	

Range bound		Explanation		
	maxnoofEDCHMACdFlows	Maximum number of MAC-d flows.		

### 9.2.2.13Dc E-DCH FDD DL Control Channel Information

The *E-DCH FDD DL Control Channel Information* IE provides information for E-DCH specific DL Control Channels to be provided to UE via RRC signalling.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-AGCH And E-RGCH/E- HICH FDD Scrambling Code	0		DL Scrambling Code 9.2.2.13	Scrambling code on which E- AGCH, E- RGCH and E-HICH are transmitted.	-	
E-AGCH Channelisation Code	0		FDD DL Channelisation Code Number 9.2.2.14		-	
Primary E-RNTI	0		E-RNTI 9.2.1.75		_	
Secondary E-RNTI	0		E-RNTI 9.2.1.75		_	
E-RGCH/E-HICH Channelisation Code	0		FDD DL Channelisation Code Number 9.2.2.14		1	
E-RGCH Signature Sequence	0		INTEGER (0maxnoofSigS eqE-RGHICH - 1)		1	
E-HICH Signature Sequence	0		INTEGER (0maxnoofSigS eqE-RGHICH - 1)		-	
Serving Grant Value	0		INTEGER (037,38)	indicates E-DCH serving grant index as defined in [32]; index 38 means zero grant	ľ	
Primary/Secondary Grant Selector	0		ENUMERATED (Primary, Secondary)	Indicates whether the Serving Grant Value is granted with a primary E- RNTI or a secondary E- RNTI	F	
E-RGCH Release Indicator	0		9.2.2.13lc		_	
Default Serving Grant in DTX Cycle 2	O		INTEGER (037,38)	Serving Grant value to be used in DTX-Cycle-2. (037) indicates E- DCH serving grant index as defined in [32]; index 38 means zero grant	YES	ignore

Range bound	Explanation		
maxnoofSigSegF-RGHICH	Maximum number of Signature Sequences for E-RGCH/E-HICH.		

### 9.2.2.13De E-DCH RL Indication

Indicates whether a RL is an E-DCH RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH RL Indication			ENUMERATED(E- DCH, non E-DCH)	

## 9.2.2.13Df E-DCH FDD Information to Modify

The *E-DCH FDD Information to Modify* IE is used for the modification of an E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		0 <maxno ofEDCHM ACdFlows &gt;</maxno 	Reference	Description	_	Criticality
>E-DCH MAC-d Flow ID	M		9.2.1.74		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>TNL QoS	0		9.2.1.58A		_	
>Maximum Number Of Retransmissions For E- DCH	0		9.2.1.81		-	
>E-DCH HARQ Power Offset FDD	0		9.2.2.13Dk		_	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69		_	
>CHOICE E-DCH Grant Type	0				_	
>>E-DCH Non- Scheduled Transmission Grant						
>>>Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	M		9.2.2.13Dm	If the Extended Maximum Number of Bits per MAC-e PDU for Nonscheduled Transmission IE is present, this IE shall be ignored. When Maximum MAC-d PDU Size Extended IE is configured for an E-DCH Logical Channel this IE indicates the maximum number of bits per MAC-i PDU.		
>>>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		_	
>>>Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	0		9.2.2.13Dr	When Maximum MAC-d PDU Size Extended IE is configured for an E-DCH Logical Channel this IE indicates the extended maximum number of bits per MAC-i PDU.	YES	reject
>>E-DCH Scheduled Transmission Grant			NULL			

>Bundling Mode Indicator	0		9.2.2.1Bb		_	
>E-DCH Logical Channel	0		E-DCH		_	
To Add			Logical			
107100			Channel			
			Information			
			9.2.1.71			
>E-DCH Logical Channel	0		9.2.1.72		_	
To Modify						
>E-DCH Logical Channel		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
To Delete		oflogicalch				
		annels>				
>>Logical Channel ID	M		9.2.1.80		_	
HARQ Process Allocation	0		HARQ		_	
For 2ms Scheduled			Process			
Transmission Grant			Allocation for			
			2ms TTI			
			9.2.2.13Dn			
E-DCH Maximum Bitrate	0		9.2.2.13T		_	
E-DCH Processing Overload	0		9.2.1.79		_	
Level						
E-DCH Reference Power	0		9.2.2.13Y		_	
Offset						
MAC-e Reset Indicator	0		9.2.1.83			
E-DCH Power Offset for	0		9.2.1.85		YES	ignore
Scheduling Info	0		0.0.0.004		VEO	
SixteenQAM UL Operation	U		9.2.2.88A		YES	reject
Indicator E-DCH MAC-d PDU Size	0		0.04.740		YES	
Format	0		9.2.1.74B		YES	reject
E-DCH DL Control		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></maxno<>			GLOBAL	ignore
Channel Grant Information		ofEDCHR			GLOBAL	ignore
Chainer Grant Information		Ls>				
>E-DCH RL ID	М	L3/	RL ID		_	
>E BOTTKE IB	141		9.2.1.53			
E-AGCH Table Choice	C-		9.2.2.100	If sixteenQAM	YES	igonre
2 713011 Table officies	SixteenQA		0.2.2.100	UL operation is	120	igonio
	M UL			not used in the		
	Operation			new		
	- polation			configuration		
				for this UE,		
				Table 16B for		
				E-AGCH in [8]		
				shall be used in		
				the new		
				configuration.		

Condition	Explanation
SixteenQAM UL Operation	The IE shall be present if the SixteenQAM UL Operation Indicator IE
	is set to 'Activate'.

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxnooflogicalchannels	Maximum number of logical channels
maxnoofEDCHRLs	Maximum number of E-DCH RLs for one UE

# 9.2.2.13Dh E-DCH Transport Format Combination Set Information (E-TFCS Information)

Whereas the related Transport Block sizes are standardised in [32] this IE gives details on the referenced Transport Block Size Table, the E-DCH Minimum Set E-TFCI, the Reference E-TFCIs and configuration parameters used for the calculation of the gain factors  $\beta_{ec}$  and  $\beta_{ed}$  defined in [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-TFCI Table Index	M		INTEGER (01,, 27)	Indicates which standardised E-TFCS Transport Block Size Table shall be used. The related tables are specified in [32].	ŀ	
E-DCH Minimum Set E-TFCI	0		INTEGER (0127)	For the concept of "E-DCH Minimum Set of TFCs" see [32] and [18].	Ŧ	
Reference E-TFCI Information		1 <maxn oofRefET FCIs&gt;</maxn 			_	
>Reference E-TFCI	М		INTEGER (0127)		-	
>Reference E-TFCI Power Offset	M		9.2.2.13Dp	If the Extended Reference E- TFCI Power Offset IE is present, this IE shall be ignored	<del>-</del>	
>Extended Reference E- TFCI Power Offset	0		9.2.2.13Dq		YES	reject
E-TFCI Boost Information	0		9.2.2.88B		YES	reject
E-DPDCH Power Interpolation	0		BOOLEAN	True means that the E-DPDCH power interpolation formula shall be applied, False means that the E-DPDCH power extrapolation formula shall be applied for the computation of the gain factor $\beta_{ed}$ according to [10]	YES	reject

Range Bound	Explanation
maxnoofRefETFCIs	Maximum number of signalled reference E-TFCIs

# 9.2.2.13Di E-TTI

The E-TTI parameter indicates the Transmission Time Interval for E-DPCH operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-TTI			ENUMERATED	
			(2ms, 10ms)	

#### 9.2.2.13Dj E-DPCCH Power Offset

The E-DPCCH Power Offset is used to calculate the E-DPCCH gain factor  $\beta_{ec}$  as defined in [10], whereas  $\beta_{ec}$  is related to the power difference between DPCCH and E-DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DPCCH Power Offset			INTEGER (08)	According to mapping in ref. [9] subclause 4.2.1.3.

#### 9.2.2.13Dk E-DCH HARQ Power Offset FDD

The E-DCH HARQ Power Offset FDD is used to calculate the unquantised gain factor for an E-TFC ( $\beta_{ed,j,uq}$ ) as defined in [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH HARQ Power Offset FDD			INTEGER (06)	According to mapping in ref. [9] subclause 4.2.1.3.

## 9.2.2.13DI E-DCH MAC-d Flow Multiplexing List

Void.

# 9.2.2.13Dm Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission

The Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission indicates the number of bits allowed to be included in a MAC-e (or MAC-i) PDU per E-DCH MAC-d flow configured for non-scheduled transmissions. If the range of the *Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission* IE is insufficient to represent the value to be sent to the Node B, the *Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission* IE shall be used to represent the value to be sent to the Node B, see section 9.2.2.13Dr.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Maximum Number of Bits per			INTEGER (119982)	
MAC-e PDU for Non-				
scheduled Transmission				

#### 9.2.2.13Dn HARQ Process Allocation For 2ms TTI

The HARQ Process Allocation for 2ms TTI indicates those HARQ processes that are allowed. MAC-d PDU"s for a MAC-d flow are only allowed to be transmitted in those processes for which the bit is set to "1".

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Process Allocation For 2ms TTI			BIT STRING (8)	The first Bit corresponds to HARQ process ID = 0, the second bit corresponds to HARQ process ID = 1, etc. The HARQ process ID for 2ms TTI is defined in [32], chapter 11.8.1.3.

#### 9.2.2.13Dp Reference E-TFCI Power Offset

The Reference E-TFCI Power Offset is used to calculate the reference E-TFC gain factor  $\beta_{ed,ref}$  as defined in [10]. If the range of the *Reference E-TFCI Power Offset* IE is insufficient to represent the value to be sent to the Node B, the *Extended Reference E-TFCI Power Offset* IE shall be used to represent the value to be sent to the Node B, see section 9.2.2.13Dq.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference E-TFCI Power Offset			INTEGER (029)	According to mapping in ref. [9] subclause 4.2.1.3

## 9.2.2.13Dq Extended Reference E-TFCI Power Offset

The Extended Reference E-TFCI Power Offset IE shall be used if the range of the Reference E-TFCI Power Offset IE (see section 9.2.2.13Dp) is insufficient to represent the value of the Reference E-TFCI Power Offset to be sent to the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Reference E-TFCI			INTEGER	According to mapping in ref.
Power Offset			(3031,)	[9] subclause 4.2.1.3

# 9.2.2.13Dr Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission

The Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission IE shall be used if the range of the Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission IE (see section 9.2.2.13Dm) is insufficient to represent the value of the Maximum Number of Bits per MAC-e (or MAC-i) PDU for Non-scheduled Transmission to be sent to the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Maximum Number of			INTEGER	
Bits per MAC-e PDU for Non-			(1998322978,)	
scheduled Transmission				

9.2.2.13E Enhanced DSCH PC

Void.

9.2.2.13F Enhanced DSCH PC Counter

Void.

9.2.2.13G Enhanced DSCH PC Indicator

Void.

9.2.2.13H Enhanced DSCH PC Wnd

Void.

9.2.2.13I Enhanced DSCH Power Offset

Void.

#### 9.2.2.13la E- RGCH/E-HICH Code Information

This parameter defines the codes which will be assigned for E- RGCH and E-HICH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE replaceremove	M			
>replace				
>>E-RGCH/E-HICH Code		1 <maxno ofERGCH EHICHs&gt;</maxno 		
>>>Code Number	M		FDD DL Channelisation Code Number 9.2.2.14	
>remove			NULL	

Range Bound	Explanation
MaxnoofERGCHEHICHs	Maximum number of E-RGCH/E-HICH channelisation codes for one
	cell.

#### 9.2.2.13lb E- AGCH Code Information

This parameter defines the codes which will be assigned for E- AGCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE replaceremove	M			
>replace				
>>E-AGCH Code		1 <maxno ofEAGCHs &gt;</maxno 		
>>>Code Number	М		FDD DL Channelisation Code Number 9.2.2.14	
>remove			NULL	

Range Bound	Explanation
MaxnoofEAGCHs	Maximum number of E-AGCH chanellisation codes for one cell.

# 9.2.2.13lc E-RGCH Release Indicator

Indicates the E-RGCH is released.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH Release Indicator			ENUMERATED (E-	
			RGCH released)	

#### 9.2.2.13Id E-AGCH Power Offset

The *E-AGCH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when F-DPCH is configured. When F-DPCH is configured, the *E-AGCH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH Power Offset			INTEGER	Unit: dB
			(0255,)	Range: -32 +31.75 dB
				Step: 0.25 dB

#### 9.2.2.13le E-RGCH Power Offset

The *E-RGCH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when F-DPCH is configured. When F-DPCH is configured, the *E-RGCH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH Power Offset			INTEGER	Unit: dB
			(0255,)	Range: -32 +31.75 dB
				Step: 0.25 dB

#### 9.2.2.13lf E-HICH Power Offset

The *E-HICH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when F-DPCH is configured. When F-DPCH is configured, the *E-HICH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Power Offset			INTEGER (0255,)	Unit: dB Range: -32 +31.75 dB Step: 0.25 dB

#### 9.2.2.13lg E-RGCH 2-Index-Step Threshold

The E-RGCH 2-index-step-threshold IE is used to determine the Serving Grant.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH 2-Index-Step Threshold			INTEGER (037)	Refers to an index in the "SG-Table" (see [32]).

#### 9.2.2.13lh E-RGCH 3-Index-Step Threshold

The E-RGCH 3-index-step-threshold IE is used to determine the Serving Grant.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH 3-Index-Step			INTEGER	Refers to an index in the "SG-
Threshold			(037)	Table" (see [32]).

#### 9.2.2.13J E-DCH Capability

Void

#### 9.2.2.13Ja E-DCH Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the RL/RLS situation and the number of uplink E-DPDCHs and their spreading factors. The reference spreading factor and number of E-DPDCH is signalled using the *Maximum Set of E-DPDCHs* IE.

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Radio Link Setup
- Radio Link Addition
- Radio Link Reconfiguration
- Radio Link Deletion

For the Radio Link Setup and Radio Link Addition procedures, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall credited to the Capacity Credit for the Radio Link Deletion procedure. For the Radio Link Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited when this difference is negative).

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs and the UL costs shall be applied to the DL or Global Capacity Credit.

For a Radio Link creating a Radio Link Set (first RL of a RLS), the cost for the RL (cost 2) and RLS (cost 1) shall be taken into account. When adding a Radio Link to a Radio Link Set, only the RL cost (cost 2) shall be taken into account.

In the case where multiple Radio Links are established in one procedure, for every created Radio Link Set, the first Radio Link is always the Radio Link with the lowest repetition number.

The costs given in the consumption law are the costs per channelization code/no of E-DPDCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SF Allocation Law		1 <maxno ofCombED PDCH&gt;</maxno 		The cost of SF allocation: the first instance corresponds to v2xN2plus2xN4, the second to v2xN2, the third to v2xN4, the fourth to vN4, the fifth to vN8, the sixth to vN16, the seventh to vN32, the eighth to vN64, the ninth to vN128, the tenth to vN256 and the eleventh to v2xM2plus2xM4.
>UL Cost 1	M		INTEGER (065535)	This is the cost of a RLS
>UL Cost 2	M		INTEGER (065535)	This is the cost of a RL
DL Cost 1	0		INTEGER (065535)	This is the cost of a RLS. If not present, zero cost shall be applied.
DL Cost 2	0		INTEGER (065535)	This is the cost of a RL. If not present, zero cost shall be applied.

Range Bound	Explanation
maxnoofCombEDPDCH	Maximum number of Configurations in the Maximum Set of E-DPDCH
	IE .

9.2.2.13K E-DCH Logical Channel Information

Void

9.2.2.13L E-DCH Logical Channel To Modify

Void

# 9.2.2.13M E-DCH MAC-d Flows Information

The *E-DCH MAC-d Flows Information* IE is used for the establishment of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows</maxno 			_	·
>E-DCH MAC-d Flow ID	М		9.2.1.74		_	
>Allocation/Retention Priority	М		9.2.1.1A		_	
>TNL QoS	0		9.2.1.58A		_	
>Payload CRC Presence Indicator	М		9.2.1.49		-	
>Maximum Number Of Retransmissions For E-DCH	М		9.2.1.81		_	
>E-DCH HARQ Power Offset FDD	М		9.2.2.13Dk		_	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69		_	
>CHOICE <i>E-DCH Grant</i> Type	М				_	
>>E-DCH Non-Scheduled Transmission Grant						
>>>Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	M		9.2.2.13Dm	If the Extended Maximum Number of Bits per MAC- e PDU for Non- scheduled Transmission IE is present, this IE shall be ignored. When Maximum MAC-d PDU Size Extended IE is configured for an E-DCH Logical Channel this IE indicates the maximum number of bits per MAC-i PDU.		
>>>HARQ Process Allocation For 2ms Non- Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn	If this IE is not included, transmission in all HARQ processes is allowed.	_	
>>>Extended Maximum Number of Bits per MAC- e PDU for Non-scheduled Transmission	0		9.2.2.13Dr	When Maximum MAC-d PDU Size Extended IE is configured for an E-DCH Logical Channel this IE indicates the extended maximum number of bits per MAC-i PDU.	YES	reject

>>E-DCH Scheduled Transmission Grant		NULL		
>Bundling Mode Indicator	0	9.2.2.1Bb	_	
>E-DCH Logical Channel Information	М	9.2.1.71	_	
>Transport Bearer Not Requested Indicator	0	9.2.2.4G	YES	ignore

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

9.2.2.13N E-DCH MAC-d Flows To Delete

Void

9.2.2.13O E-DCH MAC-d Flow ID

Void

9.2.2.13P E-RNTI

Void

9.2.2.13Q E-DCH DDI Value

Void

9.2.2.13R E-DCH Provided Bit Rate Value

Void

9.2.2.13S E-DCH Provided Bit Rate Value Information

Void

9.2.2.13T E-DCH Maximum Bitrate

The E-DCH Maximum Bitrate parameter indicates the Maximum Bitrate for an E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Maximum Bitrate			INTEGER (05742,, 574311498)	Bitrate on transport block level. Unit is kbits per second.

9.2.2.13U E-DCH Processing Overload Level

Void

9.2.2.13V E-DCH TTI Capability

This parameter defines the E-DCH TTI Capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TTI2ms Capability			BOOLEAN	True = TTI 10ms and 2ms supported for E-DCH False = only TTI 10ms supported for E-DCH

# 9.2.2.13W E-DCH SF Capability

This parameter defines the E-DCH Capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH SF Capability			ENUMERATED	Min SF supported by the cell in
			(sf64, sf32, sf16, sf8,	E-DCH
			sf4, 2sf4, 2sf2,	
			2sf2and2sf4,)	

# 9.2.2.13X E-DCH HARQ Combining Capability

This parameter defines the E-DCH HARQ Combining capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH HARQ Combining			ENUMERATED (IR	
Capability			Combining Capable,	
			Chase Combining	
			Capable, IR and	
			Chase Combining	
			Capable)	

#### 9.2.2.13Y E-DCH Reference Power Offset

The E-DCH Reference Power Offset is used to estimate the E-DPDCH power from E-TFCI without decoding MAC-e PDUs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Reference Power Offset			INTEGER (06)	According to mapping in ref. [9] subclause 4.2.1.3.

# 9.2.2.13Z E-DCH Power Offset for Scheduling Info

Void

#### 9.2.2.14 FDD DL Channelisation Code Number

The DL Channelisation Code Number indicates the DL Channelisation Code number for a specific DL physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD DL Channelisation Code Number			INTEGER (0511)	According to the mapping in [9]. The maximum value is equal to the DL spreading factor –1.

#### 9.2.2.14A FDD DL Code Information

The FDD DL Code Information IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD DL Code Information		1 <maxno ofcodes=""></maxno>		
>DL Scrambling Code	M		9.2.2.13	
>FDD DL Channelisation Code Number	М		9.2.2.14	
>Transmission Gap Pattern Sequence Code Information	0		9.2.2.53B	

Range Bound	Explanation
maxnoofCodes	Maximum number of DL code information

#### 9.2.2.14B FDD S-CCPCH Frame Offset

The FDD S-CCPCH Frame Offset IE represents a frame offset between the concerned S-CCPCH"s CFN (Connection Frame Number) relatively to the P-CCPCH"s SFN (System Frame Number) of the respective cell. The FDD S-CCPCH Frame Offset IE shall be the constant difference between the S-CCPCH"s CFN and the least significant 8 bits of the SFN (System Frame Number) on Uu.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD S-CCPCH Frame Offset			ENUMERATED (1, 2, 4,)	Offset in frames (corresponding to 10msec, 20msec or 40msec offset in time)

#### 9.2.2.15 FDD SCCPCH Offset

The Secondary CCPCH offset is defined as the time offset towards the Primary CCPCH in the cell. The offset is a multiple of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD SCCPCH Offset			INTEGER (0149)	Unit: chip Range: 038144 chips Step: 256 chips See ref. [7]

# 9.2.2.16 FDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD TPC Downlink Step Size			ENUMERATED (0.5, 1, 1.5, 2,)	Unit: dB

# 9.2.2.16a F-DPCH Capability

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-DPCH Capability			ENUMERATED (F-	
			DPCH Capable, F-	
			DPCH Non-Capable)	

#### 9.2.2.16A First RLS Indicator

The *First RLS Indicator* IE indicates if a specific Radio Link and all Radio Links which are part of the same Radio Link Set, shall be considered as the first radio links established towards the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
First RLS Indicator			ENUMERATED (	
			First RLS,	
			Not First RLS,	
			)	

# 9.2.2.17 Gap Period

Void.

## 9.2.2.18 Gap Position Mode

Void.

#### 9.2.2.18a HARQ Preamble Mode

The HARQ Preamble Mode IE is used as described as in ref [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Preamble Mode			ENUMERATED ( mode0,	"mode0" means HARQ Preamble Mode =0
			mode1)	"mode1" means HARQ Preamble Mode =1

#### 9.2.2.18b HARQ Preamble Mode Activation Indicator

The HARQ Preamble Activation Indicator indicates if the configured HARQ Preamble Mode has been activated in the Node B.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
HARQ Preamble Mode			ENUMERATED(HA	
Activation Indicator			RQ Preamble Mode	
			Activated).	

#### 9.2.2.18ba HARQ Info for E-DCH

The E-DCH HARQ Info is used to indicate the use of redundancy version (RV) for the EDCH HARQ transmissions.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
HARQ Info for E-DCH			ENUMERATED (rv0, rvtable)	"rv0" indicates that the UE will only use E_DCH RV index 0. "rvtable" indicates that the UE will use an RSN based RV index as specified in [8]

# 9.2.2.18c Logical channel ID

Void

#### 9.2.2.18A Limited Power Increase

The parameter is used for a more efficient use of the inner loop DL power control for non real time data.

If the limited power increase is used, the Node B shall use the limited power increase algorithm as specified in [10], subclause 5.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Limited Power Increase			ENUMERATED (	
			Used,	
			Not Used )	

# 9.2.2.18B Inner Loop DL PC Status

The *Inner Loop DL PC Status* IE indicates whether inner loop DL control shall be active or inactive for all radio links associated with the context identified by the *Node B Communication Context Id* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Inner Loop DL PC Status			ENUMERATED ( Active.	
			Inactive)	

#### 9.2.2.18C IPDL FDD Parameters

The IPDL FDD Parameters IE provides information about IPDL to be applied for FDD when activated.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
IP SpacingFDD	М		ENUMERATED	See [10]
			(5, 7, 10, 15, 20, 30,	
			40, 50,)	
IP Length	M		ENUMERATED	See [10]
			(5, 10)	
Seed	M		INTEGER (063)	See [10]
Burst Mode Parameters	0		9.2.1.5A	
IP Offset	M		INTEGER (09)	See [10]

#### 9.2.2.18Ca HS-DSCH configured indicator

The *HS-DSCH Configured Indicator* IE indicates the configuration of HS-DSCH for the UE. The *HS-DSCH Configured Indicator* IE shall be used for the configuration of the E-DPDCH IQ branch mapping [9].

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
HS-DSCH Configured Indicator			ENUMERATED (HS-	Indicator of the HS-DSCH
			DSCH configured,	forconfiguration of the E-
			HS-DSCH not	DPDCHs IQ branch mapping
			configured)	[9].

# 9.2.2.18D HS-DSCH FDD Information

The *HS-DSCH FDD Information* IE is used for initial addition of HS-DSCH information to a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flows Information	М		9.2.1.31IA		_	
UE Capabilities Information		1			_	
>HS-DSCH Physical Layer Category	М		9.2.1.31la		_	
>1.28 Mcps TDD Uplink Physical Channel Capability	0		9.2.3.5Gc	Not to be used.	YES	ignore
>Number of Supported Carriers	0		ENUMERA TED ( One-one carrier, One-three carrier, Three-three carrier, One-six carrier, Three-six carrier, Six-six carrier,)	Not to be used.	YES	reject
>Multi-carrier HS-DSCH Physical Layer Category	0		9.2.1.31la	Not to be used.	YES	ignore
MAC-hs Reordering Buffer Size for RLC-UM	М		9.2.1.38Ab		_	
CQI Feedback Cycle k	М		9.2.2.21B		_	
CQI Repetition Factor	C- CQICyclek		9.2.2.4Cb		_	
ACK-NACK Repetition Factor	M		9.2.2.a		_	
CQI Power Offset	M		9.2.2.4Ca		_	
ACK Power Offset	M		9.2.2.b		_	
NACK Power Offset	M		9.2.2.23a		_	
HS-SCCH Power Offset	0		9.2.2.181		_	
Measurement Power Offset	0		9.2.2.21C		_	
HARQ Preamble Mode	0		9.2.2.18a		YES	ignore
MIMO Activation Indicator	0		9.2.1.119		YES	reject
HS-DSCH MAC-d PDU Size Format	0		9.2.1.31ID	If not present, "Indexed MAC- d PDU Size" shall be used.	YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A		YES	ignore
UE with enhanced HS-SCCH support indicator	0		NULL	UE supports enhanced HS- SCCH functionality: - UE supports different HS- SCCH in consecutive TTIs and - in HS-SCCH- less operation mode the UE supports HS- SCCH orders	YES	ignore
Enhanced HS Serving CC Abort	0		ENUMERA TED (Abort Enhanced HS Serving CC,)	Shall be ignored in Radio Link Setup and Radio Link Addition procedures.	YES	reject
UE Support Indicator	0		9.2.2.117		YES	ignore

LAGUSION			

Condition	Explanation
CQICyclek	The IE shall be present if the CQI Feedback Cycle k IE is set to a
	value greater than 0.

# 9.2.2.18Da HS-DSCH FDD Secondary Serving Information

The *HS-DSCH FDD Secondary Serving Information* IE is used for initial addition of Secondary Serving HS-DSCH information to a Node B Communication Context and defines the cell specific parameters for the secondary serving HS-DSCH Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Power Offset	0		9.2.2.181		-	
Measurement Power Offset	М		9.2.2.21C		-	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A		-	
HS-DSCH-RNTI	М		9.2.1.31J		-	
Diversity Mode	0		9.2.2.9	If Diversity mode = "Closed loop mode 1" the procedure shall be rejected	YES	reject
Transmit Diversity Indicator	0		9.2.2.53		YES	reject

## 9.2.2.18E HS-DSCH FDD Information Response

The HS-DSCH Information Response provides information for HS-DSCH that have been established or modified. It also provides additional HS-DSCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		0 <maxno ofMACdFl</maxno 			_	
Response		ows>				
>HS-DSCH MAC-d Flow ID	M		9.2.1.311		_	
>Binding ID	0		9.2.1.4		_	
>Transport Layer Address	0		9.2.1.63		_	
>HS-DSCH Initial Capacity Allocation	0		9.2.1.31Ha		_	
HS-SCCH Specific Information Response		0 <maxno ofHSSCC Hcodes&gt;</maxno 			_	
>Code Number	М		INTEGER (0127)		_	
HARQ Memory Partitioning	0		9.2.1.102		_	
HARQ Preamble Mode Activation Indicator	0		9.2.2.18b		YES	ignore
MIMO N/M Ratio	0		9.2.2.96		YES	ignore
SixtyfourQAM DL Usage Indicator	0		9.2.2.74B		YES	ignore
HS-DSCH TB Size Table Indicator	0		9.2.2.18Ee		YES	ignore

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes

# 9.2.2.18EA HS-DSCH FDD Secondary Serving Information Response

The HS-DSCH Secondary Serving Information Response provides information for Secondary Serving HS-DSCH that have been established or modified. It also provides additional HS-DSCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Specific		0 <maxno< td=""><td></td><td></td></maxno<>		
Secondary Serving		ofHSSCC		
Information Response		Hcodes>		
>Code Number	M		INTEGER (0127)	
SixtyfourQAM DL Usage Indicator	0		9.2.2.74B	
HS-DSCH TB Size Table Indicator	0		9.2.2.18Ee	

Range Bound	Explanation
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes

# 9.2.2.18EB HS-DSCH FDD Secondary Serving Information To Modify

The *HS-DSCH FDD Secondary Serving Information To Modify* IE is used for modification of cell specific Secondary Serving HS-DSCH information in a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Power Offset	0		9.2.2.181		-	
Measurement Power Offset	0		9.2.2.21C		-	
HS-SCCH Code Change Grant	0		9.2.1.31L		-	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A		-	
Diversity Mode	0		9.2.2.9	If Diversity mode = "Closed loop mode 1" the procedure shall be rejected	YES	reject
Transmit Diversity Indicator	C- DiversityM ode		9.2.2.53		YES	reject
Non Cell Specific Tx Diversity	0		ENUMERAT ED (Tx Diversity,)	Value = "Tx Diversity": Diversity Mode and Transmit Diversity Indicator shall be non cell specific.	YES	reject

Condition	Explanation
DiversityMode	The IE shall be present if <i>Diversity Mode</i> IE is present and not set to "None".

# 9.2.2.18EC HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised

The HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE is used for modification of Secondary Serving HS-DSCH information in a Node B Communication Context with the Unsynchronised Radio Link Reconfiguration procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Power Offset	0		9.2.2.181	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A	

## 9.2.2.18Ea HS-DSCH FDD Update Information

The *HS-DSCH FDD Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Code Change Indicator	0		9.2.1.31K		_	
CQI Feedback Cycle k	0		9.2.2.21B		_	
CQI Repetition Factor	0		9.2.2.4Cb		-	
ACK-NACK Repetition Factor	0		9.2.2.a		_	
CQI Power Offset	0		9.2.2.4Ca		-	
ACK Power Offset	0		9.2.2.b		-	
NACK Power Offset	0		9.2.2.23a		-	
HS-PDSCH Code Change Indicator	0		9.2.1.31M		YES	ignore

# 9.2.2.18Eaa HS-DSCH FDD Secondary Serving Update Information

The *HS-DSCH FDD Secondary Serving Update Information* IE provides information for Secondary Serving HS-DSCH to be updated. At least one IE shall be present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change Indicator	0		9.2.1.31K	
HS-PDSCH Code Change Indicator	0		9.2.1.31M	This IE shall never be included. If received it shall be ignored.

#### 9.2.2.18Eb HS-DSCH Serving Cell Change Information

The HS-DSCH Serving Cell Change Information IE contains information which is used in HS-DSCH Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.18D		_	
HS-DSCH-RNTI	M		9.2.1.31J		_	
Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.68		YES	reject
Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.66		YES	reject

# 9.2.2.18Ec HS-DSCH Serving Cell Change Information Response

The *HS-DSCH Serving Cell Change Information Response* IE contains information which is used in HS-DSCH Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Serving Cell					_	
Change						
>Successful						
>>HS-DSCH FDD	M		9.2.2.18E		_	
Information Response						
>>Continuous Packet	0		9.2.2.69		YES	ignore
Connectivity HS-SCCH						
less Information						
Response						
>Unsuccessful						
>>Cause	M		9.2.1.6		_	

# 9.2.2.18Eca HS-DSCH Secondary Serving Cell Change Information Response

The *HS-DSCH Secondary Serving Cell Change Information Response* IE contains information which is used in HS-DSCH Secondary Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Secondary Serving Cell Change				
>Successful				
>>HS-DSCH FDD Secondary Serving Information Response	M		9.2.2.18EA	
>Unsuccessful				
>>Cause	M		9.2.1.6	

#### 9.2.2.18Ed E-DCH Serving Cell Change Information Response

The *E-DCH Serving Cell Change Information Response* IE contains information which is used in E-DCH Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Serving Cell Change				
>Successful				
>>RL Information Response		0 <maxno ofRLs&gt;</maxno 		
>>>RL ID	M		9.2.1.53	
>>>E-DCH FDD DL Control Channel	М		9.2.2.13Dc	
Information				
>Unsuccessful				
>>Cause	M		9.2.1.6	

Range bound	Explanation	
maxnoofRLs	Maximum number of RLs for one UE	

#### 9.2.2.18Ee HS-DSCH TB Size Table Indicator

The HS-DSCH TB Size Table Indicator IE is used to indicate that octet aligned table [32] shall be used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH TB Size Table			ENUMERATED	
Indicator			(octet aligned)	

#### 9.2.2.18F HS-PDSCH FDD Code Information

This parameter defines the codes which will be assigned for HS-PDSCHs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of HS-PDSCH Codes	M		INTEGER (0maxHS-PDSCHC odeNrComp-1)	
Start Code Number	C- NumCode s		INTEGER (1maxHS-PDSCHC odeNrComp-1)	

Condition	Explanation
NumCodes	The IE shall be present if the Number Of HS-PDSCH Codes IE is set
	to a value greater than 0.

Range Bound	Explanation
MaxHS-PDSCHCodeNrComp	Maximum number of codes at the defined spreading factor, within the
	complete code tree

#### 9.2.2.18G HS-SCCH FDD Code Information

This parameter defines the codes which will be assigned for HS-SCCH. The Node B will assign codes for HS-SCCHs among these codes when it sets up a HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE replaceremove	M			
>replace				
>>HS-SCCH Code		1 <maxno ofHSSCC Hs&gt;</maxno 		
>>>Code Number	М		INTEGER (0maxHS-SCCHCo deNrComp-1)	
>remove			NULL	

Range Bound	Explanation
MaxnoofHSSCCHs	Maximum number of HS-SCCHs for one cell.
MaxHS-SCCHCodeNrComp	Maximum number of codes at the defined spreading factor, within the
	complete code tree

#### 9.2.2.18H HS-SCCH ID

Void.

#### 9.2.2.18I HS-SCCH Power Offset

The *HS-SCCH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when FDPCH is configured. When F-DPCH is configured, the *HS-SCCH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Power Offset			INTEGER (0255)	Unit: dB
				Range: -32 +31.75 dB
				Step: 0.25 dB

#### 9.2.2.18K Initial DL DPCH Timing Adjustment Allowed

The *Initial DL DPCH Timing Adjustment Allowed* IE indicates that the Node B is allowed to perform a timing adjustment (either a timing advance or a timing delay with respect to the SFN timing) when establishing a radio link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Initial DL DPCH Timing Adjustment Allowed			ENUMERATED ( initial DL DPCH	
			Timing Adjustment Allowed)	

#### 9.2.2.19 Max Adjustment Period

Void.

#### 9.2.2.20 Max Adjustment Step

Defines the maximum allowed value for the change of DL power level during a certain number of slots that can be utilised by the downlink power balancing algorithm. *Max Adjustment Step* IE defines a time period, in terms of number of slots, in which the accumulated power adjustment shall be maximum 1dB. This value does not include the DL inner loop PC adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Adjustment Step			INTEGER (110)	Unit: Slots

9.2.2.20A Max Number Of PCPCHs

Void.

9.2.2.20B Max Number Of UL E-DPDCHs

Void.

9.2.2.20C Maximum Set of E-DPDCHs

The Maximum Set of E-DPDCHs as defined in [8]. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Set of E-DPDCHs			ENUMERATED (vN256, vN128, vN64, vN32, vN16, vN8, vN4, v2xN4, v2xN2, v2xN2plus2xN4,, v2xM2plus2xM4)	

9.2.2.20D Maximum Number Of Retransmissions For E-DCH

Void

9.2.2.20E MAC-es Guaranteed Bit Rate

Void

9.2.2.20F MAC-e Reset Indicator

Void

#### 9.2.2.21 Maximum Number Of UL DPDCHs

Maximum number of uplink DPDCHs to be used during the connection. Needed by the rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number Of UL DPDCHs			INTEGER (16)	

#### 9.2.2.21a Maximum Target Received Total Wide Band Power

The Maximum Target Received Total Wide Band Power indicates the maximum target UL interference for a certain cell under CRNC, including received wide band power from all sources.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Target Received Total Wide Band Power			INTEGER (0621)	The Value mapping is according to mapping for measurement type "Received Total Wide Band Power" in [22].

# 9.2.2.21b Target Non-serving E-DCH to Total E-DCH Power Ratio

The Target Non-serving E-DCH to Total E-DCH Power Ratio indicates the target ratio of the received E-DCH power from non-serving UEs to the received total E-DCH power.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Target Non-serving E-DCH to Total E-DCH Power Ratio			INTEGER (0100)	Unit: % Range: 0100 % Step: 1 %

#### 9.2.2.21A Maximum PDSCH Power

Void.

#### 9.2.2.21B CQI Feedback Cycle k

The CQI Feedback Cycle k IE provides the duration of the CQI feedback cycle.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CQI Feedback Cycle k			ENUMERATED (0, 2, 4, 8, 10, 20, 40, 80, 160,, 16, 32, 64)	Unit ms

#### 9.2.2.21C Measurement Power Offset

The Measurement Power Offset IE is used as described in ref [10] subclause 6A.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Power Offset			INTEGER (-1226)	Unit: dB
				Range: -613dB
				Step: 0.5dB

#### 9.2.2.21D MICH Mode

The number of Notification Indicators (NIs) transmitted in a MICH frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MICH Mode			ENUMERATED	Number of NIs per frame
			(18, 36, 72, 144,,	-
			16, 32,64,128)	

#### 9.2.2.22 Minimum UL Channelisation Code Length

Minimum UL channelisation code length (spreading factor) of a DPDCH which is used during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code			ENUMERATED	
Length			(4, 8, 16, 32, 64,	
			128, 256,)	

# 9.2.2.22a Min UL Channelisation Code Length For E-DCH FDD

Void.

## 9.2.2.23 Multiplexing Position

Multiplexing Position specifies whether fixed or flexible positions of transport channels shall be used in the physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiplexing Position			ENUMERATED (	
			Fixed,	
			Flexible)	

#### 9.2.2.23a NACK Power Offset

The NACK Power Offset IE indicates Power offset used in the UL between the HS-DPCCH slot carrying HARQ NACK information and the associated DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
NACK Power Offset			INTEGER (08,)	According to mapping in ref. [9] subclause 4.2.1.

9.2.2.23A N\_EOT

Void.

9.2.2.23B NF\_max

Void.

9.2.2.23C N\_Start\_Message

Void.

#### 9.2.2.23D Number Of Reported Cell Portions

Number of Reported Cell Portions indicates the number of Best Cell Portions values which shall be included in the measurement report.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Reported Cell Portions			INTEGER (164,)	

9.2.2.24 Pattern Duration (PD)

Void.

9.2.2.24A PCP Length

Void.

9.2.2.25 PDSCH Code Mapping

Void.

#### 9.2.2.26 PICH Mode

The number of paging indicators (PIs) in a PICH frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PICH Mode			ENUMERATED	Number of PIs per frame
			(18, 36, 72, 144,)	

# 9.2.2.27 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Adjustment Type			ENUMERATED (	
			None,	
			Common,	
			Individual)	

#### 9.2.2.28 Power Control Mode

Void.

#### 9.2.2.29 Power Offset

This IE defines a power offset relative to the Downlink transmission power of a DPDCH in case the Node B Communication Context is configured to use DPCH in the downlink or relative to a Secondary CCPCH data field.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset			INTEGER (024)	Unit: dB Range: 06 dB
				Step: 0.25 dB

#### 9.2.2.29A Power\_Raise\_Limit

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power_Raise_Limit			INTEGER (010)	Unit: dB
				Range: 010 dB
				Step: 1 dB

#### 9.2.2.30 Power Resume Mode

Void.

# 9.2.2.31 Preamble Signature

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Signatures			BIT STRING (16)	Each bit indicates availability for a signature, where the signatures are numbered "signature 0" up to "signature 15". The value 1 of a bit indicates that the corresponding signature is available and the value 0 that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [9].

#### 9.2.2.32 Preamble Threshold

The IE sets the threshold for preamble detection. The ratio between received preamble power during the preamble period and interference level shall be above this threshold in order to be acknowledged.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Threshold			INTEGER (072)	Unit: dB Range: -36 0 dB Step: 0.5 dB

## 9.2.2.33 Primary CPICH Power

The Primary CPICH power is the power that shall be used for transmitting the P-CPICH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CPICH, the Primary CPICH power is the linear sum of the power that is used for transmitting the Primary CPICH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Power			INTEGER (-100500)	Value = Primary CPICH Power/10 Unit: dBm Range: -10.0+50.0 dBm Step: 0.1 dB

#### 9.2.2.33A Primary CPICH Usage For Channel Estimation

The *Primary CPICH Usage For Channel Estimation* IE indicates whether the Primary CPICH may be used for channel estimation or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Usage For			ENUMERATED (	
Channel Estimation			Primary CPICH may	
			be used,	
			Primary CPICH shall	
			not be used)	

#### 9.2.2.34 Primary Scrambling Code

The Primary scrambling code to be used in the cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary Scrambling Code			INTEGER (0511)	

#### 9.2.2.35 Propagation Delay

The Propagation delay is the one-way propagation delay of the radio signal from the MS to the Node B. If the range of the *Propagation Delay* IE is insufficient to represent the measured value, the *Propagation Delay* IE shall be set to its maximum value, and the *Extended Propagation Delay* IE shall be used to represent the propagation delay value, see subclause 9.2.2.35A.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Propagation Delay			INTEGER (0255)	Unit: chip Range: 0765 chips
				Step: 3 chips

# 9.2.2.35A Extended Propagation Delay

The Extended Propagation delay is the one-way propagation delay of the radio signal from the MS to the Node B. It shall be used if the *Propagation Delay* IE (see 9.2.2.35) cannot represent the measured value, due to range limitation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Propagation Delay			INTEGER (2551023)	Continuation of intervals as defined in [22]. Unit: chip Range: 7653069 chips Step: 3 chips

9.2.2.36 QE-Selector

Void.

9.2.2.36A Qth Parameter

Void.

#### 9.2.2.37 RACH Slot Format

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Slot Format			ENUMERATED (03,)	See ref. [7].

#### 9.2.2.38 RACH Sub Channel Numbers

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0" to "subchannel 11". The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4.

#### 9.2.2.39 RL Set ID

The RL Set ID uniquely identifies one RL Set within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Set ID			INTEGER (031)	

# 9.2.2.39a RL Specific E-DCH Information

The RL Specific E-DCH Information IE provides RL specific E-DCH Information.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Specific E-DCH Information		1 <maxno ofEDCHM ACdFlows &gt;</maxno 		
>E-DCH MAC-d Flow ID	M		9.2.1.74	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
E-AGCH Power Offset	0		9.2.2.13ld	
E-RGCH Power Offset	0		9.2.2.13le	
E-HICH Power Offset	0		9.2.2.13lf	

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

## 9.2.2.39A Received Total Wide Band Power

The Received total wide band power indicates the UL interference at a certain cell under CRNC, see ref. [4].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Received Total Wide Band Power			INTEGER (0621)	According to mapping in [22].

#### 9.2.2.39B Reference Received Total Wide Band Power

When sent by the CRNC, the Reference Received Total Wide Band Power indicates the reference UL interference (received noise level) for a certain cell under CRNC. This value may be used for E-DCH scheduling in the Node B.

When reported by the Node B, the Reference Received Total Wide Band Power indicates the reference UL interference (received noise level as an estimate of the noise floor) estimate from the Node B. This value may be used, e.g. for admission or congestion control in the CRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Received Total Wide Band Power			INTEGER (0621)	The Value mapping is according to mapping for measurement type "Received Total Wide Band Power" in [22].

# 9.2.2.39C Reference Received Total Wide Band Power Reporting

The Reference Received Total Wide Band Power Reporting controls the indication of the Reference Received Total Wide Band Power estimate from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Received Total			ENUMERATED	
Wide Band Power Reporting			(Reference	
			Received Total Wide	
			Band Power	
			Requested)	

# 9.2.2.39D Reference Received Total Wide Band Power Support Indicator

The Reference Received Total Wide Band Power Support Indicator indicates whether indication of Reference Received Total Wide Band Power is supported by the Node B.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Reference Received Total			ENUMERATED	
Wide Band Power Support			(Indication of	
Indicator			Reference Received	
			Total Wide Band	
			Power supported)	

9.2.2.40 S-Field Length

Void.

9.2.2.40A Scheduling Information

Void

9.2.2.41 Scrambling Code Change

Void.

# 9.2.2.42 Scrambling Code Number

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scrambling Code Number			INTEGER (015)	Identification of scrambling code see ref. [9].

# 9.2.2.43 Secondary CCPCH Slot Format

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Secondary CCPCH Slot			INTEGER (017,)	
Format				

# 9.2.2.43A Secondary CPICH Information Change

The Secondary CPICH Information Change IE indicates modification of information of the Secondary CPICH for channel estimation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Secondary CPICH Information Change	М			
>New Secondary CPICH				
>>Secondary CPICH Information	M		Common Physical Channel ID 9.2.1.13	
>Secondary CPICH Shall Not Be Used			NULL	

9.2.2.44 SSDT Cell Identity

Void.

9.2.2.44A SSDT Cell Identity For EDSCHPC

Void.

9.2.2.45 SSDT Cell ID Length

Void.

## 9.2.2.46 SSDT Support Indicator

The SSDT Support Indicator indicates whether a RL supports SSDT or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSDT Support Indicator			ENUMERATED ( Not Used, SSDT Not Supported)	The SSDT Support Indicator IE shall never be set to 'Not Used'. If received it shall be rejected.

9.2.2.47 SSDT Indication

Void.

#### 9.2.2.48 STTD Indicator

Indicates if STTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
STTD Indicator			ENUMERATED (	
			active,	
			inactive,	
			)	

# 9.2.2.48A Synchronisation Indicator

The *Synchronisation Indicator* IE indicates that Timing Maintained Synchronisation shall be used at start of Radio Link, see also [10].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Synchronisation Indicator			ENUMERATED	
			(Timing Maintained	
			Synchronisation,)	

# 9.2.2.48B Serving E-DCH RL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Serving E-DCH RL	M			
>Serving E-DCH RL in this Node B				
>>Serving E-DCH RL ID	M		RL ID 9.2.1.53	
>Serving E-DCH RL not in this Node B			NULL	

#### 9.2.2.49 T Cell

Timing delay used for defining start of SCH, CPICH and the DL scrambling code(s) in a cell relative BFN. Resolution 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T Cell			ENUMERATED	Unit: chip
			(0, 1,,9)	Range: 02304 chips
				Step: 256 chips
				See ref. [17]

# 9.2.2.49A TFCI2 Bearer Information Response

Void.

# 9.2.2.50 TFCI Signalling Mode

This parameter indicates if the normal or split mode is used for the TFCI. In the event that the split mode is to be used then the IE indicates whether the split is "Hard" or "Logical", and in the event that the split is "Logical" the IE indicates the number of bits in TFCI (field 2).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Signalling Option	M		ENUMERATED ( Normal, Not Used)	The value "Not Used" shall not be used by the CRNC. The procedure shall be rejected by the Node B if the value "Not Used" is received.
Not Used	0		NULL	
Not Used	0		NULL	

9.2.2.51 TGD

Void.

9.2.2.52 TGL

Void.

# 9.2.2.53 Transmit Diversity Indicator

The Transmit Diversity Indicator indicates whether transmit diversity shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmit Diversity Indicator			ENUMERATED ( active, inactive)	

# 9.2.2.53A Transmission Gap Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Gap Pattern Sequence Information		1 <maxt GPS&gt;</maxt 		
>TGPS Identifier	M		INTEGER (1maxTGPS)	Transmission Gap Pattern Sequence Identifier: Establish a reference to the compressed mode pattern sequence. Up to <maxtgps> simultaneous compressed mode pattern sequences can be used.</maxtgps>
>TGSN	М		INTEGER (014)	Transmission Gap Starting Slot Number: The slot number of the first transmission gap slot within the TGCFN.
>TGL1	M		INTEGER (114)	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots.
>TGL2	0		INTEGER (114)	The length of the second Transmission Gap within the transmission gap pattern. If omitted, then TGL2=TGL1.
>TGD	M		INTEGER (0, 15 269)	Transmission Gap Distance: indicates the number of slots between the starting slots of two consecutive transmission gaps within a transmission gap pattern. If there is only one transmission gap in the transmission gap pattern, this parameter shall be set to "0" ("0" =undefined).
>TGPL1	M		INTEGER (1144,)	The duration of transmission gap pattern 1 in frames.
>Not-to-be-used-1	0		INTEGER (1144,)	This IE shall never be included in the IE group. If received it shall be ignored.
>UL/DL Mode	М		ENUMERATED ( UL only, DL only, UL/DL)	Defines whether only DL, only UL or combined UL/DL compressed mode is used.
>Downlink Compressed Mode Method	C-DL		ENUMERATED ( Not Used, SF/2, Higher Layer Scheduling,)	Method for generating downlink compressed mode gap.The <i>Downlink Compressed Mode Method</i> IE shall never be set to 'Not Used'.
>Uplink Compressed Mode Method	C-UL		ENUMERATED ( SF/2, Higher Layer Scheduling, )	Method for generating uplink compressed mode gap.
>Downlink Frame Type	М		ENUMERATED (A, B,)	Defines if frame structure type "A" or "B" shall be used in downlink compressed mode.
>DeltaSIR1	M		INTEGER (030)	Delta in SIR target value to be set in the Node B during the frame containing the start of the first transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase). Unit: dB Range: 03 dB Step: 0.1 dB

>DeltaSIRafter1	M	INTEGER (030)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the first transmission gap in the transmission gap pattern. Unit: dB Range: 03 dB Step: 0.1 dB
>DeltaSIR2	0	INTEGER (030)	Delta in SIR target value to be set in the Node B during the frame containing the start of the second transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase).  When omitted, DeltaSIR2 = DeltaSIR1. Unit: dB Range: 03 dB Step: 0.1 dB
>DeltaSIRafter2	0	INTEGER (030)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the second transmission gap in the transmission gap pattern. When omitted, DeltaSIRafter2 = DeltaSIRafter1. Unit: dB Range: 03 dB Step: 0.1 dB

Condition	Explanation
UL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "UL only" or "UL/DL".
DL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "DL only" or "UL/DL".

Range Bound	Explanation	
maxTGPS	Maximum number of transmission gap pattern sequences	

# 9.2.2.53B Transmission Gap Pattern Sequence Code Information

This IE indicates whether the alternative scrambling code shall used for the Downlink compressed mode method or not in the Transmission Gap Pattern Sequence. For details see [9].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Transmission Gap Pattern			ENUMERATED (	Indicates whether the
Sequence Code Information			Code Change,	alternative scrambling code is
			No Code Change)	used for compressed mode
				method "SF/2".

# 9.2.2.54 UL/DL compressed mode selection

Void.

9.2.2.55 UL delta SIR

Void.

9.2.2.56 UL delta SIR after

Void.

#### 9.2.2.57 UL DPCCH Slot Format

Indicates the slot format used in DPCCH in UL, according to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL DPCCH Slot Format			INTEGER (05,)	Value 5 shall not be used.
				If value 5 is received, the
				procedure shall be rejected.

9.2.2.58 UL SIR

Void.

## 9.2.2.59 UL Scrambling Code

The UL Scrambling Code is the scrambling code used by UE. Every UE has its specific UL Scrambling Code.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Scrambling Code Number	M		INTEGER (02 <sup>24</sup> -1)	
UL Scrambling Code Length	M		ENUMERATED (	
			Short,	
			Long)	

9.2.2.60 UL Capacity Credit

Void.

## 9.2.2.61 UL DPDCH Indicator For E-DCH Operation

The UL DPDCH Indicator For E-DCH Operation parameter indicates whether some UL DPCH parameters should be ignored or not in the message in which the *UL DPDCH Indicator For E-DCH Operation* IE was included or that any UL DPDCH resources shall be removed from the communication context configuration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL DPDCH Indicator For E- DCH Operation			ENUMERATED ( UL-DPDCH present, UL-DPDCH not	
			present)	

## 9.2.2.62 Fast Reconfiguration Mode

The *Fast Reconfiguration Mode* IE is used to notify the Node B that the SRNC would like to use the activation time 'when the UE is detected on the new configuration' as the timing for the reconfiguration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Fast Reconfiguration Mode			ENUMERATED (	
			Fast)	

## 9.2.2.63 Fast Reconfiguration Permission

The Fast Reconfiguration Permission IE is used to indicate to the CRNC that the Node B can apply the activation time 'when the UE is detected on the new configuration' for this reconfiguration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Fast Reconfiguration			ENUMERATED (	
Permission			Allowed,)	

## 9.2.2.64 Continuous Packet Connectivity DTX-DRX Capability

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Continuous Packet			ENUMERATED	
Connectivity DTX-DRX			(Continuous Packet	
Capability			Connectivity DTX-	
·			DRX Capable,	
			Continuous Packet	
			Connectivity DTX-	
			DRX Non-Capable)	

## 9.2.2.65 Continuous Packet Connectivity HS-SCCH less Capability

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Continuous Packet			ENUMERATED	
Connectivity HS-SCCH less			(Continuous Packet	
Capability			Connectivity HS-	
			SCCH less Capable,	
			Continuous Packet	
			Connectivity HS-	
			SCCH less Non-	
			Capable)	

## 9.2.2.66 Continuous Packet Connectivity DTX-DRX Information

The *Continuous Packet Connectivity DTX-DRX Information* IE defines the parameters used for Continuous Packet Connectivity DTX-DRX operation (see ref. [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE DTX DRX Offset	M		INTEGER (0159)	Units of subframes. Offset of the UE DTX and DRX cycles at the given TTI
Enabling Delay	M		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames
DTX Information		1		
>CHOICE E-DCH TTI Length	М			
>>2ms				
>>>UE DTX Cycle 1	М		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes
>>>UE DTX Cycle 2	М		ENUMERATED (4,	Units of subframes

	1	1	5 0 40 40 00 00	T
			5, 8, 10, 16, 20, 32,	
>>>MAC DTX Cycle	M		40, 64, 80, 128, 160) ENUMERATED (1,	Units of subframes
>>>IVIAC DTA Cycle	IVI			Units of subframes
>>10ms			4, 5, 8, 10, 16, 20)	
>>>UE DTX Cycle 1	M		ENUMERATED (1,	Units of subframes
_			5, 10, 20)	
>>>UE DTX Cycle 2	М		ENUMERATED (5, 10, 20, 40, 80, 160)	Units of subframes
>>>MAC DTX Cycle	М		ENUMERATED (5, 10, 20)	Units of subframes
>Inactivity Threshold for UE	М		ENUMERATED (1,	Units of E-DCH TTIs
DTX Cycle 2			4, 8, 16, 32, 64, 128, 256)	
>UE DTX Long Preamble	M		ENUMERATED	Units of slots
			(2,4,15)	
>MAC Inactivity Threshold	M		ENUMERATED (1,	Units of E-DCH TTIs
			2, 4, 8, 16, 32, 64,	
			128, 256, 512,	
			Infinity)	
>CQI DTX Timer	M		ENUMERATED (0,	Units of subframes
			1, 2, 4, 8, 16, 32, 64,	
			128, 256, 512,	
			Infinity)	
>UE DPCCH burst1	M		ENUMERATED (1, 2, 5)	Units of subframes
>UE DPCCH burst2	М		ENUMERATED (1,	Units of subframes
JOE DI COITBUISIZ	IVI		2, 5)	Office of Subframes
DRX Information		01	_, _, _,	
>UE DRX Cycle	М		ENUMERATED (4,	Units of subframes
	-		5, 8, 10, 16, 20)	
>Inactivity Threshold for UE	М		ENUMERATED (0,	Units of subframes
DRX Cycle			1, 2, 4, 8, 16, 32, 64,	
			128, 256, 512)	
>Inactivity Threshold for UE	М		ENUMERATED (0,	Units of E-DCH TTIs
Grant Monitoring			1, 2, 4, 8, 16, 32, 64,	
]			128, 256)	
>UE DRX Grant Monitoring	М		BOOLEAN	True: DRX Grant Monitoring
				shall be applied.
				False: DRX Grant Monitoring
				shall not be applied.
				Shall hot be applied.

# 9.2.2.67 Continuous Packet Connectivity DTX-DRX Information To Modify

The Continuous Packet Connectivity DTX-DRX Information To Modify IE is used for modification of Continuous Packet Connectivity DTX-DRX information in a Node B Communication Context. The Continuous Packet Connectivity DTX-DRX Information To Modify IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE DTX DRX Offset	0		INTEGER (0159)	Units of subframes. Offset of the UE DTX and DRX cycles at the given TTI
Enabling Delay	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames
CHOICE DTX Information To Modify	0			
>Modify				
>>CHOICE E-DCH TTI Length	0			
>>>2ms				
>>>UE DTX Cycle 1	М		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes
>>>>UE DTX Cycle 2	M		ENUMERATED (4,	Units of subframes

		5, 8, 10, 16, 20, 32,	
		40, 64, 80, 128, 160)	
>>>>MAC DTX Cycle	M	ENUMERATED (1,	Units of subframes
>>>>IVIAC DTA Cycle	IVI		Units of Subframes
4000		4, 5, 8, 10, 16, 20)	
>>>10ms	<del>    _   _   _   _   _   _   _   _  </del>	ENUMEDATED (4	11.7
>>>UE DTX Cycle 1	M	ENUMERATED (1,	Units of subframes
LIE DTV Ovele 0	1.4	5, 10, 20) ENUMERATED (5,	Heite of subfrages
>>>UE DTX Cycle 2	M		Units of subframes
MAC DEV	1	10, 20, 40, 80, 160)	
>>>MAC DTX Cycle	M	ENUMERATED (5,	Units of subframes
		10, 20)	
>>Inactivity Threshold for	0	ENUMERATED (1,	Units of E-DCH TTIs
UE DTX Cycle 2		4, 8, 16, 32, 64, 128,	
		256)	
>>UE DTX Long	0	ENUMERATED	Units of slots
Preamble		(2,4,15)	
>>MAC Inactivity	0	ENUMERATED (1,	Units of E-DCH TTIs
Threshold		2, 4, 8, 16, 32, 64,	
		128, 256, 512,	
		Infinity)	
>>CQI DTX Timer	0	ENUMERATED (0,	Units of Subframes
		1, 2, 4, 8, 16, 32, 64,	
		128, 256, 512,	
		Infinity)	
>>UE DPCCH burst1	0	ENUMERATED (1,	Units of Subframes
		2, 5)	
>>UE DPCCH burst2	0	ENÚMERATED (1,	Units of Subframes
		2, 5)	
>Deactivate		NULL	
CHOICE DRX Information To	0		
Modify			
>Modify			
>>UE DRX Cycle	0	ENUMERATED (4,	Units of subframes
77 C 21 01 0 y 0.10		5, 8, 10, 16, 20)	
>>Inactivity Threshold for	0	ENUMERATED (0,	Units of subframes
UE DRX Cycle		1, 2, 4, 8, 16, 32, 64,	Critic or oddiramed
OL DIOX Oyalo		128, 256, 512)	
>>Inactivity Threshold for	0	ENUMERATED (0,	Units of E-DCH TTIs
UE Grant Monitoring		1, 2, 4, 8, 16, 32, 64,	Office of E Bott 1113
OL Grant Monitoring		128, 256)	
>>UE DRX Grant	0	BOOLEAN	True: DRX Grant Monitoring
Monitoring		DOOLL/ III	shall be applied.
Montoning			False: DRX Grant Monitoring
			shall not be applied.
>Deactivate		NULL	onan not be applied.
- Deadiivate		INOLL	

# 9.2.2.68 Continuous Packet Connectivity HS-SCCH less Information

The *Continuous Packet Connectivity HS-SCCH less Information* IE defines the parameters used for Continuous Packet Connectivity HS-SCCH less operation (see ref. [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		1 <maxno ofHS- DSCHTBS sHS- SCCHless &gt;</maxno 		
>Transport Block Size Index	M		INTEGER (1maxnoofHS-DSC HTBSs)	
>HS-PDSCH Second Code Support	M		BOOLEAN	True = The second HS- PDSCH code shall also be used

		False = The second HS-
		PDSCH code shall not be used

Range Bound	Explanation
maxnoofHS-DSCHTBSsHS-SCCHless	Maximum number of HS-DSCH Transport Block Sizes used for HS-
	SCCH-less operation
maxnoofHS-DSCHTBSs	Maximum number of HS-DSCH Transport Block Sizes

## 9.2.2.69 Continuous Packet Connectivity HS-SCCH less Information Response

The *Continuous Packet Connectivity HS-SCCH less Information Response* IE provides information for HS-SCCH less operation determined within the Node B (see ref. [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-PDSCH First Code Index	M		INTEGER (1maxHS-PDSCHC odeNrComp-1)	Index of first HS-PDSCH code
HS-PDSCH Second Code Index	0		INTEGER (1maxHS-PDSCHC odeNrComp-1)	Index of second HS-PDSCH code See NOTE 1.
NOTE 1: The "HS-PDSCH second code index" value is the value of IE "HS-PDSCH First Code Index" incremented				

### 9.2.2.69A Continuous Packet Connectivity HS-SCCH less Deactivate Indicator

The Continuous Packet Connectivity HS-SCCH less Deactivate Indicator IE is used to deactivate HS-SCCH less operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Continuous Packet	M		NULL	
Connectivity HS-SCCH less				
Deactivate Indicator				

Range Bound	Explanation
maxHS-PDSCHCodeNrComp	Maximum number of codes at the defined spreading factor, within the
	complete code tree

9.2.2.70 MIMO Capability

Void

9.2.2.71 MIMO Activation Indicator

Void

9.2.2.72 MIMO Mode Indicator

Void

## 9.2.2.73 MIMO Pilot Configuration

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Pilot Configuration	M			
>Primary and Secondary CPICH				
>>Associated Secondary CPICH	M		Common Physical Channel ID 9.2.1.13	
>Normal and Diversity Primary CPICH			NULL	

## 9.2.2.74 SixtyfourQAM DL Capability

Void.

## 9.2.2.74A Sixtyfour QAM Usage Allowed Indicator

The Sixtyfour QAM Usage Allowed Indicator IE indicates whether the Node B is allowed to use 64 QAM modulation for HS-DSCH transmission or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Sixtyfour QAM Usage Allowed	M		ENUMERATED	
Indicator			(Allowed, Not-	
			Allowed)	

### 9.2.2.74B SixtyfourQAM DL Usage Indicator

The SixtyfourQAM DL Usage Indicator IE indicates if the Node B is using 64 QAM modulation for the HS-DSCH transmission, or if the Node B is not using 64 QAM modulation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixtyfourQAM DL Usage Indicator			ENUMERATED (SixtyfourQAM DL Used, SixtyfourQAM DL Not Used)	

### 9.2.2.75 HS-DSCH Common System Information

The *HS-DSCH Common System Information* IE provides information for HS-DSCH configured for UE in Cell\_FACH, in Cell\_PCH and in URA\_PCH and Information related to BCCH modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Common Information		01		
>CCCH Priority Queue ID	М		Priority Queue ID 9.2.1.49C	
>SRB#1 Priority Queue ID	M		Priority Queue ID 9.2.1.49C	
>Associated Common MAC Flow	M		Common MAC Flow ID 9.2.2.79	The Common MAC Flow ID shall be one of the flow IDs defined in the Common MAC Flow Specific Information of this IE or shall only refer to a Common MAC flow already existing in the old configuration.
>FACH Measurement Occasion Cycle Length Coefficient	0		9.2.2.82	
>RACH Measurement Result	M		9.2.2.84	
>BCCH Specific HS-DSCH- RNTI Information	M		9.2.2.85	
Common MAC Flow Specific Information		0 <maxno ofCommon MACFlows</maxno 		
>Common MAC Flow ID	М		9.2.2.79	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.
>Common MAC Flow Priority Queue Information		0 <maxno ofCommon MACQueu es&gt;</maxno 		
>>Priority Queue Information for Enhanced FACH	M		Priority Queue Information for Enhanced FACH/PCH 9.2.1.117	
>Transport Bearer Request Indicator	0		9.2.1.62A	Shouldn"t be contained if the MAC flow is setup in procedure.  Should be contained if the MAC flow is modified in procedure

Range bound	Explanation
maxnoofCommonMACFlows	Maximum number of Common MAC Flows
maxnoofCommonMACQueues	Maximum number of Priority Queues for Common MAC Flow

# 9.2.2.76 HS-DSCH Paging System Information

The HS-DSCH Paging System Information IE provides information for HS-DSCH configured for UE in Cell\_PCH and URA\_PCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flow Specific Information		1 <maxno ofPagingM ACFlow&gt;</maxno 		
>Paging MAC Flow ID	М		9.2.1.113	
>HSDPA Associated PICH Information	М		9.2.2.81	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	
>Paging MAC Flow Priority Queue Information		0 <maxno ofPagingM ACQueues &gt;</maxno 		
>>Priority Queue Information for Enhanced PCH	M		Priority Queue Information for Enhanced FACH/PCH 9.2.1.117	
>Transport Bearer Request Indicator	0		9.2.1.62A	Shouldn"t be contained if the MAC flow is setup in procedure. Should be contained if the MAC flow is modified in procedure
HS-SCCH Power	М		DL Power 9.2.1.21	
HS-PDSCH Power	М		DL Power 9.2.1.21	
Number of PCCH transmissions	М		INTEGER (15)	Number of subframes used to transmit the PCCH.
Transport Block Size List		1 <maxno ofHS- DSCHTBS sE-PCH&gt;</maxno 		
>Transport Block Size Index for Enhanced PCH	М		INTEGER (132)	Index of the value range 1 to 32 of the MAC-ehs transport block size as specified in appendix A of [32]

Range bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows
maxnoofPagingMACQueues	Maximum number of Priority Queues for Paging MAC Flow
maxnoofHS-DSCHTBSsE-PCH	Maximum number of HS-DSCH Transport Block Sizes used for
	Enhanced PCH operation associated HS-SCCH less

# 9.2.2.77 HS-DSCH Common System Information Response

The *HS-DSCH Common System Information Response* IE provides information for HS-DSCH configured for UE not in Cell\_DCH that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Specific Information Response		0 <maxno ofHSSCC Hcodes&gt;</maxno 		Channelization codes on HS-SCCH is transmitted for UE not in Cell_DCH
>Code Number	M		INTEGER (0127)	First indexed HS-SCCH Channelisation code should be used for the BCCH specific H-RNTI.

HARQ Memory Partitioning	0		9.2.1.102	
Common MAC Flow Specific Information Response		0 <maxno ofCommon MACFlows</maxno 		
		>		
>Common MAC Flow ID	M		9.2.2.79	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
>HS-DSCH Initial Capacity Allocation	0		9.2.1.31Ha	

Range Bound	Explanation
maxnoofCommonMACFlows	Maximum number of Common MAC Flows
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes

## 9.2.2.78 HS-DSCH Paging System Information Response

The *HS-DSCH Paging System Information Response* IE provides information for HS-DSCH configured for UE in Cell\_PCH and URA\_PCH that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flow Specific Information Response		1 <maxno ofPagingM ACFlow&gt;</maxno 		
>Paging MAC Flow ID	M		9.2.1.113	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
>HS-PDSCH Code Index	М		INTEGER (1maxHS- PDSCHCod eNrComp- 1)	Index of HS-PDSCH code

Range bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows

#### 9.2.2.79 Common MAC Flow ID

Common MAC Flow ID is the unique identifier for one Common MAC flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common MAC Flow ID			INTEGER (07)	

## 9.2.2.80 Paging MAC Flow ID

Void.

#### 9.2.2.81 HSDPA Associated PICH Information

The HSDPA Associated PICH Information IE provides information for PICH used for Enhanced PCH operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE HSDPA PICH				

>Shared with PCH			
>>Common Physical Channel ID	M	9.2.1.13	
>Not shared with PCH			
>>Common Physical Channel ID	M	9.2.1.13	
>>FDD DL Channelisation Code Number	M	9.2.2.14	
>>PICH Power	M	9.2.1.49A	
>>PICH Mode	M	9.2.2.26	Number of PI per frame
>>STTD Indicator	M	9.2.2.48	

9.2.2.82 FACH Measurement Occasion Cycle Length Coefficient

Void.

9.2.2.83 Priority Queue Information for Enhanced FACH/PCH

Void.

## 9.2.2.84 RACH Measurement Result

The RACH Measurement Result identifies which RACH measurement result is forwarded to Node B in Frame Protocol.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
RACH Measurement Result			ENUMERATED	
			(CPICH Ec/No,	
			CPICH RSCP,	
			Pathloss,)	

## 9.2.2.85 BCCH Specific HS-DSCH RNTI Information

The BCCH Specific HS-DSCH RNTI Information IE provides information for BCCH Transmission using HS-DSCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
BCCH Specific HS-DSCH	M		HS-DSCH-	
RNTI			RNTI	
			9.2.1.31J	
HS-SCCH Power	M		DL Power	
			9.2.1.21	
HS-PDSCH Power	M		DL Power	
			9.2.1.21	

9.2.2.86 Enhanced FACH Capability

Void.

9.2.2.87 Enhanced PCH Capability

Void.

9.2.2.88 SixteenQAM UL Capability

This parameter defines the SixteenQAM uplink capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
SixteenQAM UL Capability			ENUMERATED	
			(SixteenQAM UL	
			Capable,	
			SixteenQAM UL	
			Non-Capable)	

## 9.2.2.88A SixteenQAM UL Operation Indicator

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
SixteenQAM UL Operation			ENUMERATED	
Indicator			(Activate,	
			Deactivate)	

### 9.2.2.88B E-TFCI Boost Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-TFCI BetaEC Boost	M		INTEGER (0127,)	E-TFCI threshold beyond which boosting of E-DPCCH is enabled
UL Delta T2TP	C-E- TFClboost 127		INTEGER (06,)	Total E-DPDCH power across all codes to the combined power of DPCCH and E-DPCCH

Condition	Explanation	
E-TFClboost127	The IE shall be present if the E-TFCI BetaEC Boost	
	IE value is not set o 127.	

9.2.2.89 SixteenQAM UL Information

Void.

9.2.2.90 SixteenQAM UL Information To Modify

Void.

### 9.2.2.91 Modulation Power Offset

Indicates the modulation, and power offset in case of 16QAM, to be used for the Secondary CCPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Modulation	M			
>QPSK			NULL	
>QAM				
>>CPICH Secondary CCPCH Power Offset	М		INTEGER (-114,)	Power offset between CPICH and secondary CCPCH. Unit: dB Range: -11 +4 dB Step: 1 dB

## 9.2.2.92 Extended Secondary CCPCH Slot Format

Indicates the slot format used for the Secondary CCPCH. The extended slot format shall only be used for MBSFN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Secondary CCPCH Slot Format			INTEGER(1823,)	

#### 9.2.2.93 F-DPCH Slot Format

The F-DPCH Slot Format IE defines the F-DPCH slot format for the TPC bits, as defined in [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-DPCH Slot Format			INTEGER (09)	

## 9.2.2.94 F-DPCH Slot Format Capability

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-DPCH Slot Format Capability			ENUMERATED (F-DPCH Slot Format Capable, F-DPCH Slot Format Non-Capable)	

### 9.2.2.95 Max UE DTX Cycle

The *Max UE DTX Cycle* IE defines the maximum UE DTX cycle supported by the Node B for Continuous Packet Connectivity DTX-DRX operation.

Presence	Range	IE Type and Reference	Semantics Description
М		ENUMERATED (v5,	Units of subframes
		J	Reference

#### 9.2.2.96 MIMO N/M Ratio

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
MIMO N/M Ratio	М		ENUMERATED (1/2,	
			2/3, 3/4, 4/5, 5/6,	
			6/7, 7/8, 8/9, 9/10,	
			1/1,)	

#### 9.2.2.97 Common MAC Flows To Delete

The Common MAC Flows To Delete IE is used for the removal of Common MAC flows from a Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common MAC Flows To Delete		1 <maxno ofCommon MACFlows &gt;</maxno 		
>Common MAC Flow ID	M		9.2.2.79	

Range Bound	Explanation
maxnoofCommonMACFlows	Maximum number of Common MAC Flows

## 9.2.2.98 Paging MAC Flows To Delete

The Paging MAC Flows To Delete IE is used for the removal of Paging MAC flows from a Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flows To Delete		1 <maxno ofPagingM ACFlow&gt;</maxno 		
>Paging MAC Flow ID	M		9.2.1.113	

Range Bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows

### 9.2.2.99 MAC-ehs Reset Timer

Void.

#### 9.2.2.100 E-AGCH Table Choice

The E-AGCH Table Choice IE indicates the choice of the E-AGCH table in[8].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH Table Choice	М		ENUMERATED (Table 16B, Table 16B-1,)	Table 16B indicates the Table 16B: Mapping of Absolute Grant Value in [8] and Table 16B-1 indicates the Table 16B.1: Alternative Mapping of Absolute Grant Value in [8].

## 9.2.2.101 Common E-DCH Capability

This parameter defines the Common E-DCH capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Common E-DCH Capability			ENUMERATED	
			(Common E-DCH	
			Capable, Common	
			E-DCH non	
			Capable)	

## 9.2.2.102 E-Al Capability

This parameter defines the E-AI capability for a Common E-DCH capable Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-Al Capability			ENUMERATED (E-	
			Al Capable, E-Al	
			non Capable)	

# 9.2.2.103 Common E-DCH System Information

The *Common E-DCH System Information* IE provides information for E-DCH configured for UE in Cell\_FACH and Idle state.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Common E-DCH UL DPCH Information		01			-	
>UL SIR Target	М		UL SIR 9.2.1.67A		-	
>DPC Mode	0		9.2.2.13C	If received, this IE shall be ignored. DPC mode 0 shall be applied for Common E-DCH (see ref.[10]).	-	
Common E-DCH E-DPCH Information		01			-	
>Maximum Set of E- DPDCHs	М		9.2.2.20C		-	
>Puncture Limit	М		9.2.1.50		-	
>E-TFCS Information	М		9.2.2.13Dh		-	
>E-TTI	М		9.2.2.13Di		-	
>E-DPCCH Power Offset	М		9.2.2.13Dj		-	
>E-RGCH 2-Index-Step Threshold	0		9.2.2.13lg		-	
>E-RGCH 3-Index-Step Threshold	0		9.2.2.13lh		-	
>HARQ Info for E-DCH	М		9.2.2.18ba		_	
Common E-DCH		01			_	
Information						
>E-DCH Reference Power Offset	0		9.2.2.13Y		-	
>E-DCH Power Offset for Scheduling Info	0		9.2.1.85		-	
>Maximum E-DCH resource allocation for CCCH	M		ENUMERATED (8, 12, 16, 24, 32, 40, 80, 120,)	Interms of TTIs	-	
>Maximum period for collision resolution phase	М		INTEGER(824 ,)	Interms of TTIs	-	
>Maximum TB Sizes	0		9.2.2.106		_	
>Common E-DCH implicit release indicator	М		BOOLEAN	TRUE means implicit release is in use. FALSE means implicit release is not in use.	-	
Common E-DCH HS- DPCCH Information		01			-	
>ACK-NACK Repetition Factor	М		9.2.2.a		-	
>ACK Power Offset	М		9.2.2.b		-	
>NACK Power Offset	М		9.2.2.23a		-	
>Common E-DCH CQI Information	0				-	
>>CQI Feedback Cycle k	М		9.2.2.21B		-	
>>CQI Repetition Factor	C- CQICyclek		9.2.2.4Cb		-	
>>CQI Power Offset	М		9.2.2.4Ca		-	

>>Measurement Power Offset	М		9.2.2.21C		-	
Common E-DCH Preamble Control Information		01			-	
>Common Physical Channel ID	М		9.2.1.13		-	
>Common E-DCH Preamble Signature	М		Preamble Signatures 9.2.2.31		-	
>Scrambling Code Number	М		9.2.2.42		-	
>Preamble Threshold	М		9.2.2.32		-	
>E-Al Indicator	0		BOOLEAN	TRUE means E- Als are in use on the AICH. FALSE means E-Als are not in use on the AICH.	-	
>Common E-DCH AICH Information		01			-	
>>Common Physical Channel ID	М		9.2.1.13		-	
>>AICH Transmission Timing	М		9.2.2.1		-	
>>FDD DL Channelisation Code Number	М		9.2.2.14		-	
>>AICH Power	М		9.2.2.D		-	
>>STTD Indicator	М		9.2.2.48		-	
Common E-DCH F-DPCH Information		01			-	
>F-DPCH slot format	М		9.2.2.93		-	
>FDD TPC DL Step Size	М		9.2.2.16		-	
>Initial DL Transmission Power	0		DL Power 9.2.1.21	Initial power on F- DPCH	YES	ignore
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on F-DPCH	YES	ignore
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on F-DPCH	YES	ignore
Common E-DCH E-AGCH Channelisation Code Number	0		FDD DL Channelisation Code Number 9.2.2.14		-	
Common E-DCH Resource Combination Information		0 <max noofCo mmonE DCHs&gt;</max 			-	
>Soffset	М		INTEGER (09,)		-	

			_			
>F-DPCH DL Code Number	М		FDD DL Channelisation Code Number		-	
>UL DPCH Scrambling Code	M		9.2.2.14 UL Scrambling Code		-	
3343			9.2.2.59			
>E-RGCH/E-HICH Channelisation Code	М		FDD DL Channelisation Code Number 9.2.2.14		-	
>E-RGCH Signature Sequence	0		INTEGER (0maxnoofSig SeqE-RGHICH - 1)		-	
>E-HICH Signature Sequence	М		INTEGER (0maxnoofSig SeqE-RGHICH - 1)		-	
UL Common MAC Flow Specific Information		0 <max noofCo mmonM ACFlow s&gt;</max 	,		-	
>UL Common MAC Flow ID	М		Common MAC Flow ID		-	
			9.2.2.79			
>Transport Bearer Request Indicator	M		9.2.1.62A		-	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	-	
> Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	-	
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	-	
>Payload CRC Presence Indicator	М		9.2.1.49		-	
>Bundling Mode Indicator	0		9.2.2.1Bb		-	
>Common E-DCH MAC- d Flow Specific Information	M		9.2.2.105		•	
E-RNTI List Request	0		NULL		YES	ignore

Condition	Explanation
CQICyclek	The IE shall be present if the CQI Feedback Cycle k IE is set to a
	value greater than 0.

Range bound	Explanation
maxnoofCommonMACFlows	Maximum number of Common MAC Flows
maxnoofCommonEDCHs	Maximum number of Common E-DCH Resource Combination for a
	cell

# 9.2.2.104 Common E-DCH System Information Response

The *Common E-DCH System Information Response* IE provides information for E-DCH configured for UE in Cell\_FACH and Idle state that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Common MAC Flow Specific Information Response		1> <ma xnoofCo mmonM ACFlow \$&gt;&gt;</ma 			-	
>UL Common MAC Flow ID	M		Common MAC Flow ID 9.2.2.79		-	
>Binding ID	0		9.2.1.4		-	
>Transport Layer Address	0		9.2.1.63		-	
Serving Grant Value	M		INTEGER (037,38)	(037) indicates E-DCH serving grant index as defined in [32]; Index 38 is not allowed	-	
E-RNTI List	0		9.2.2.123	The Node B shall not allocate any E-RNTIs listed in this IE for a UE	YES	ignore

Range bound	Explanation
maxnoofCommonMACFlows	Maximum number of Common MAC Flows

# 9.2.2.105 Common E-DCH MAC-d Flow Specific Information

The *Common E-DCH MAC-d Flow Specific Information* IE is used for the establishment or modity Common E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows</maxno 		
>Common E-DCH MAC-d Flow ID	М		E-DCH MAC-d Flow ID 9.2.1.74	The E-DCH MAC-d flow identity reserved for CCCH transmission is defined in [18].
>Maximum Number Of Retransmissions For E-DCH	М		9.2.1.81	
>E-DCH HARQ Power Offset FDD	М		9.2.2.13Dk	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69	
>Common E-DCH Logical Channel information		1 <maxno oflogicalch annels&gt;</maxno 		
>>Logical Channel ID	М		9.2.1.80	
>>Maximum MAC-c PDU Size Extended	M		MAC PDU Size Extended 9.2.1.38C	

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d Flows
maxnooflogicalchannels	Maximum number of logical channels

### 9.2.2.106 Maximum TB Size

The *Maximum TB Size* IE may be used by the sheduler in order to minimize the cell edge interference for cell edge users (and other users).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum TB Size cell edge	M		INTEGER	Unit: Bits
users			(05000,)	
Maximum TB Size other users	M		INTEGER	Unit: Bits
			(05000,)	

## 9.2.2.107 Enhanced UE DRX Capability

Void.

## 9.2.2.108 Enhanced UE DRX Information

The *Enhanced UE DRX Information* IE provides information for configuring the UE in Cell\_FACH state to discontinuously receive HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T321	M		ENUMERATED (100, 200, 400, 800,)	Determines the time the UE waits until initiating DRX operation, in ms.
HS-DSCH DRX cycle <sub>FACH</sub>	M		ENUMERATED (4, 8, 16, 32,)	Determines the length of the DRX Cycle during DRX operation, in frames
HS-DSCH Rx burst <sub>FACH</sub>	M		ENUMERATED (1, 2, 4, 8, 16,)	Determines the period within the DRX Cycle that the UE continuously receives HS- DSCH, in frames
DRX Interruption by HS- DSCH data	М		ENUMERATED (DrxInterruptionConfigured, DrxInterruptionNotConfigured)	

# 9.2.2.109 E-DPCCH Power Boosting Capability

This parameter defines the E-DPCCH Power Boosting Capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DPCCH Power Boosting			ENUMERATED (E-	
Capability			DPCCH Power	
			Boosting Capable,	
			E-DPCCH Power	
			Boosting Non-	
			Capable)	

# 9.2.2.110 SixtyfourQAM DL and MIMO Combined Capability

Void

## 9.2.2.111 HS-DSCH Preconfiguration Info

The *HS-DSCH Preconfiguration Info* IE provides information of the target cell preconfiguration in the Node B as defined in [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sets of HS-SCCH Codes		1 <maxn oofHSDSC H&gt;</maxn 		Index 1 refers to the primary serving HS-DSCH cell Index 2 <maxnoofhsdsch> refer to secondary serving HS-DSCH cells in the order as listed in 9.2.2.112 HS-DSCH Preconfiguration Setup. Max index is 2 in this 3GPP release.</maxnoofhsdsch>
> HS-SCCH		1 <maxno< td=""><td></td><td></td></maxno<>		
Preconfigured Codes		ofHSSCC Hcodes>		
>> Code Number	M		INTEGER (0127)	
> SixtyfourQAM DL Usage Indicator	0		9.2.2.74B	
> HS-DSCH TB Size Table Indicator	0		9.2.2.18Ee	
HARQ Memory Partitioning	M		9.2.1.102	
E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc	
HARQ Preamble Mode Activation Indicator	0		9.2.2.18b	
MIMO N/M Ratio	0		9.2.2.96	
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.69	

Range bound	Explanation
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes
maxnoofHSDSCH	Maximum number of Primary Serving plus Secondary Serving HS-DSCH cells for one UE

## 9.2.2.112 HS-DSCH Preconfiguration Setup

The *HS-DSCH Preconfiguration Setup* IE indicates that the Node B shall preconfigure set(s) of HS-SCCH codes and may contain a list of secondary serving HS-DSCH cells to be preconfigured for Enhanced Service Cell Change. The Cell Change procedure for Dual Cell operation is described in [49]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
MAC-hs/ehs reset scheme	M		ENUMERATE D (Always, Inter NodeB Change)	MAC-hs/ehs reset handling at enhanced HS serving cell change: "Always" means always reset "Inter Node B Change" means Only reset at Inter NodeB cell change	-	
HS-DSCH Physical Layer Category	М		9.2.1.31la		_	
MAC-hs Reordering Buffer Size for RLC-UM	М		9.2.1.38Ab		_	
Secondary Cells		0 <max noofHSD SCH-1&gt;</max 		Preconfigured secondary serving HS-DSCH cell. maxnoofHSDSCH-1 is max 1 in this 3GPP release.	-	
> Secondary C-ID	M		9.2.1.9	C-ID of the preconfigured secondary serving HS-DSCH cell	_	
> Num Secondary HS-SCCH Codes	0		INTEGER (1 maxnoofHSS CCHcodes)	For the secondary serving HS-DSCH cell	_	
>Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A	For the secondary serving HS-DSCH cell	_	
Num Primary HS- SCCH Codes	0		INTEGER (1 maxnoofHSS CCHcodes)	For the primary serving HS-DSCH cell	_	
HARQ Preamble Mode	0		9.2.2.18a		_	
MIMO Activation Indicator	0		9.2.1.119		_	
HS-DSCH MAC-d PDU Size Format	0		9.2.1.31ID	If not present, "Indexed MAC-d PDU Size" shall be assumed.	_	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A	For the primary serving HS-DSCH cell	_	
UE with enhanced HS- SCCH support indicator	0		NULL	UE supports enhanced HS- SCCH functionality: - UE supports different HS-SCCH in consecutive TTIs and - in HS-SCCH-less operation mode the UE supports HS- SCCH orders	-	
Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.68		_	
UE Support Indicator Extension	0		9.2.2.117		YES	ignore

Range bound	Explanation
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

## 9.2.2.113 Multi Cell Capability Info

This parameter defines the Multi Cell capability information for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multi Cell Capability	M		ENUMERATED (Multi Cell Capable, Multi Cell non Capable)	
Possible Secondary Serving Cell List		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. In Rel-8, secondary cells are subject to the adjacency requirement [22]
>Possible Secondary Serving Cell	М		Local Cell ID 9.2.1.38	

Range bound	Explanation
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.

#### 9.2.2.114 Minimum Reduced E-DPDCH Gain Factor

The minimum gain factor  $(\beta_{ed,k,reduced,min})$  defined in [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Reduced E-DPDCH Gain Factor			ENUMERATED (8/15, 11/15, 15/15,	
			21/15, 30/15, 42/15, 60/15, 84/15,)	

### 9.2.2.115 IMB Parameters

The IMB Parameters IE contains specific parameters needed for 3.84Mcps MBSFN IMB operation.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Sub-frame number	M		INTEGER (04,)	
Last DL Channelisation Code Number	0		DL Channelisation Code Number 9.2.2.14	In case of IMB using multiple channelization codes this IE indicates the last one as defined [18].

## 9.2.2.116 Common E-DCH HS-DPCCH Capability

This parameter defines the HS-DPCCH capability for a Common E-DCH capable Local Cell.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Common E-DCH HS-DPCCH			ENUMERATED (HS-	
Capability			DPCCH non-	
			Capable, ACK-	
			NACK Capable,	
			ACK-NACK and CQI	
			Capable)	

## 9.2.2.117 UE Support Indicator Extension

The UE Support Indicator Extension IE is used to indicate the support level in the UE for optional HSDPA functions to the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE support indicator extension			BIT STRING (32)	Each bit indicates whether the UE supports a particular HSDPA function or not. The value 1 of a bit indicates that the corresponding functionality is supported in the UE and value 0 indicates that the corresponding functionality is not supported in the UE. Each bit is defined as follows: the first bit: Different HS-SCCH In Consecutive TTIs Support Indicator, the second bit: HS-SCCH orders in HS-SCCH-less Operation Support Indicator.  Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

### 9.2.2.118 MIMO Power Offset For S-CPICH Capability

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Power Offset For S-			ENUMERATED (S-	
CPICH Capability			CPICH Power	
			Offset Capable, S-	
			CPICH Power	
			Offset Not Capable)	

# 9.2.2.119 Power Offset For Secondary CPICH for MIMO

The *Power Offset For S-CPICH for MIMO* IE indicates the relative transmit power of the S-CPICH compared to the primary CPICH transmit power, when S-CPICH is used as a phase reference for a second transmit antenna in MIMO mode [10].

Presence	Range	IE Type and Reference	Semantics Description
		INTEGER(-6 0)	Offset in dB
	Presence	Presence Range	Reference

## 9.2.2.120 MIMO Pilot Configuration Extension

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Pilot Configuration	M			
>Primary and Secondary CPICH				
>> Power Offset For Secondary CPICH for MIMO	M		9.2.2.119	
>Normal and Diversity Primary CPICH			NULL	This IE is not used in this release.

## 9.2.2.121 TX Diversity on DL Control Channels by MIMO UE Capability

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TX Diversity on DL Control Channels by MIMO UE Capability			ENUMERATED (DL Control Channel Tx Diversity for MIMO UE with non-diverse P-CPICH Capable, DL Control Channel	
			Tx Diversity for MIMO UE with non-diverse P- CPICH Not Capable)	

### 9.2.2.122 Cell Capability Container

The Cell Capability Container IE indicates the cell capability by setting the corresponding bit in the BIT String.

The cell capability of multi-cell related functions may depend on that the cell also is multi-cell capable (adjacent carrier). These capability indicators shall be ignored if the cell is not Multi Cell Capable. These support indicators are indicated in the table below with /Multi-cell/. Cell Capability for the capabilities marked /Multi-cell/ indicates capability regardless of multi-cell type for the local cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container			Reference BIT STRING (128)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows.  The first bit: Cell Specific Tx Diversity Handling For Multi Cell Operation Capability /Multi-cell/.  Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver. Note that Reserved bits are not considered as a spare
				bit. They shall however be set to 0 by the transmitter and shall be ignored by the receiver.

#### 9.2.2.123 E-RNTI List

The *E-RNTI List* IE provides the list of E-RNTIs which can be allocated by CRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RNTI List		1 <maxnoo< th=""><th></th><th></th></maxnoo<>		
		fERNTIs>		
>E-RNTI	M		9.2.1.75	

Range bound	Explanation
MaxnoofERNTIs	Maximum number of ERNTIs that can be allocated by the CRNC

## 9.2.2.124 Precoding Weight Set Restriction

This parameter defines the preferred precoding weight set restriction configuration as defined in [18].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Precoding Weight Set			ENUMERATED	
Restriction			(Preferred, Not	
			Preferred)	

# 9.2.2.125 Non-Serving RL Preconfiguration Setup

The Non-Serving RL Preconfiguration Setup IE indicates that the Node B may preconfigure E-DCH DL Code Information configured for new non-serving RL for Enhanced Serving Cell Change and contains the information for the location of new serving RL after the Enhanced Service Cell Change.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
CHOICE new Serving RL	M			
>New Serving RL in the			NULL	
Node B				
>New Serving RL Not in the			NULL	
Node B				
>New Serving RL in the			NULL	
Node B or New Serving RL				
Not in the Node B				

### 9.2.2.126 Non-Serving RL Preconfiguration Info

The *Non-Serving RL Preconfiguration Info* IE provides information for the new non-serving RL after Enhanced Serving Cell Change.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
New non-serving RL E-DCH	0		9.2.2.13Dc	E-DCH FDD DL Control
FDD DL Control Channel			E-DCH FDD DL	Channel Information for non-
Information A			Control Channel	serving RL in Serving E-DCH
			Information	RLS
New non-serving RL E-DCH	0		9.2.2.13Dc	E-DCH FDD DL Control
FDD DL Control Channel			E-DCH FDD DL	Channel Information for non-
Information B			Control Channel	serving RL in non serving E-
			Information	DCH RLS in case serving RL
				is in the Node B
New non-serving RL E-DCH	0		9.2.2.13Dc	E-DCH FDD DL Control
FDD DL Control Channel			E-DCH FDD DL	Channel Information for non-
Information C			Control Channel	serving RL in case serving RL
			Information	is not in the Node B

# 9.2.3 TDD specific Parameters

9.2.3.1 Block STTD Indicator

Void.

9.2.3.2 Burst Type

Void.

### 9.2.3.3 CCTrCH ID

The CCTrCH ID for dedicated and shared channels identifies unambiguously an uplink or downlink CCTrCH inside a Radio Link. For S-CCPCH, it identifies unambiguously a downlink CCTrCH within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CCTrCH ID			INTEGER (015)	

#### 9.2.3.4 Cell Parameter ID

The Cell Parameter ID identifies unambiguously the [3.84 Mcps TDD and 7.68Mcps TDD - Code Groups, Scrambling Codes, Midambles and Toffset] [1.28 Mcps TDD - SYNC-DL and SYNC-UL sequences, the scrambling codes and the midamble codes] (see ref. [20]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Parameter ID			INTEGER	
			(0127,)	

### 9.2.3.4A Constant Value

The Constant Value is the power margin used by a UE to set the proper uplink power for a DCH, USCH, or a RACH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Constant Value			INTEGER	Unit: dB
			(-1010,)	Range: -10 +10 dB
				Step: 1 dB.

### 9.2.3.4B DL Timeslot ISCP

The DL Timeslot ISCP is the measured interference in a downlink timeslot at the UE, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot ISCP			INTEGER (091)	According to mapping in ref. [5].

### 9.2.3.4C DCH TDD Information

The DCH TDD Information IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCH TDD Information		1 <maxno ofDCHs&gt;</maxno 			_	
>Payload CRC Presence Indicator	M		9.2.1.49		_	
>UL FP Mode	М		9.2.1.66		_	
>ToAWS	М		9.2.1.61		_	
>ToAWE	М		9.2.1.60		_	
>DCH Specific Info		1 <maxno ofDCHs&gt;</maxno 			_	
>>DCH ID	М		9.2.1.20		_	
>>CCTrCH ID	M		9.2.3.3	UL CCTrCH in which the DCH is mapped	_	
>>CCTrCH ID	M		9.2.3.3	DL CCTrCH in which the DCH is mapped	_	
>>Transport Format Set	М		9.2.1.59	For UL	_	
>>Transport Format Set	М		9.2.1.59	For DL	_	
>>Allocation/Retention Priority	М		9.2.1.1A		_	
>>Frame Handling Priority	М		9.2.1.30		_	
>>QE-Selector	C- CoorDCH		9.2.1.50A		_	
>>Unidirectional DCH Indicator	0		9.2.1.68		YES	reject
>TNL QoS	0		9.2.1.58A		YES	ignore

Condition	Explanation
CoorDCH	The IE shall be present if this DCH is part of a set of coordinated
	DCHs (number of instances of the DCH Specific Info IE is greater
	than 1).

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for one UE

# 9.2.3.4D DCHs TDD To Modify

The DCHs TDD To Modify IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCHs TDD To Modify		1 <maxno ofDCHs&gt;</maxno 			_	
>UL FP Mode	0		9.2.1.66		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>Transport Bearer Request Indicator	M		9.2.1.62A		_	
>DCH Specific Info		1 <maxno ofDCHs&gt;</maxno 			_	
>>DCH ID	М		9.2.1.20		_	
>>CCTrCH ID	0		9.2.3.3	UL CCTrCH in which the DCH is mapped.	_	
>>CCTrCH ID	0		9.2.3.3	DL CCTrCH in which the DCH is mapped	_	
>>Transport Format Set	0		9.2.1.59	For the UL.	_	
>>Transport Format Set	0		9.2.1.59	For the DL.		
>>Allocation/Retention Priority	0		9.2.1.1A		-	
>>Frame Handling Priority	0		9.2.1.30		_	
>TNL QoS	0		9.2.1.58A		YES	ignore

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for one UE

## 9.2.3.4E DL Timeslot Information

The *DL Timeslot Information* IE provides information for DL Time slot to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot Information		1 <maxno ofDLts&gt;</maxno 		
>Time Slot	M		9.2.3.23	
>Midamble Shift And Burst Type	М		9.2.3.7	
>TFCI Presence	M		9.2.1.57	
>DL Code Information	М		TDD DL Code Information 9.2.3.19B	

Range Bound	Explanation
maxnoofDLts	Maximum number of Downlink time slots per Radio Link

#### 9.2.3.4F DL Time Slot ISCP Info

The DL Time Slot ISCP Info IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Time Slot ISCP Info		1 <maxno ofDLts&gt;</maxno 		
>Time Slot	М		9.2.3.23	
>DL Timeslot ISCP	М		9.2.3.4B	

Range Bound	Explanation
maxnoofDLts	Maximum number of Downlink time slots per Radio Link for 3.84Mcps
	TDD.

### 9.2.3.4G Cell Sync Burst Code

The Cell Sync Burst Code IE indicates which Code is used for a given Cell Sync Burst.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Code			INTEGER (07,)	

### 9.2.3.4H Cell Sync Burst Code Shift

The Cell Sync Burst Code Shift IE indicates the number of code shifts used for a given Cell Sync Burst.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Code Shift			INTEGER (07)	

#### 9.2.3.4I CSB Measurement ID

The *Cell Sync Burst Measurement ID* IE uniquely identifies any cell synchronisation burst measurement per Node B Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CSB Measurement ID			INTEGER (065535)	

### 9.2.3.4J Cell Sync Burst Repetition Period

The *Cell Sync Burst Repetition Period* IE represents the number of consecutive Radio Frames after which the cell synchronisation burst transmission/measurement is repeated. This means that if the Time Slot K is assigned to the cell synchronisation burst transmission/measurements in the Radio Frame J, the cell synchronisation burst transmission/measurement is also in all the Radio Frames J+n\*Repetition Period.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Repetition Period			INTEGER (04095)	

## 9.2.3.4K Cell Sync Burst SIR

Indicates the Signal to Interference Ratio of the cell synchronisation burst measurement according definition in [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst SIR			INTEGER (031)	According to mapping in [23]

#### 9.2.3.4L Cell Sync Burst Timing

The *Cell Sync Burst Timing* IE defines the time of start (defined by the first detected path in time) of the cell synchronisation burst of a neighbouring cell see [5] for 3.84Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Cell Synch Burst Timing Value	М		INTEGER (01048575,)	
>Steady State Phase				
>>Cell Synch Burst Timing	M		INTEGER	
Value			(0255,)	

## 9.2.3.4La Cell Sync Burst Timing LCR

The *Cell Sync Burst Timing LCR* IE defines the time of start (defined by the first detected path in time) of the cell synchronisation burst of a neighbouring cell see [5] for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase			110.0.0.0	According to mapping in [23]
>Initial Phase				
>>Cell Synch Burst Timing	M		INTEGER (0	
Value			524287,)	
>Steady State Phase				
>>Cell Synch Burst Timing	M		INTEGER	
Value			(0127,)	

### 9.2.3.4M Cell Sync Burst Timing Threshold

The *Cell Sync Burst Timing Threshold* IE defines the threshold that shall trigger a CELL SYNCHRONISATION REPORT message.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Timing Threshold			INTEGER (0254)	Unit: chip Range: 0 31.75 chips Step: 0.125 chip

#### 9.2.3.4N CSB Transmission ID

The Cell Sync Burst Transmisson ID IE uniquely identifies any cell synchronisation burst transmission per Node B Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CSB Transmission ID			INTEGER (065535)	

### 9.2.3.40 DL Timeslot Information LCR

The DL Timeslot Information LCR IE provides information for DL Time slot to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Timeslot Information LCR		1 <ma xnoofD LtsLCR &gt;</ma 			-	
>Time Slot LCR	M		9.2.3.24A		1	
>Midamble Shift LCR	M		9.2.3.7A		-	
>TFCI Presence	M		9.2.1.57		1	
>DL Code Information	M		TDD DL Code Information LCR 9.2.3.19C		I	
>Initial DL Transmission Power	0		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH	YES	ignore
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH	YES	ignore

Range Bound	Explanation
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps
	TDD.

### 9.2.3.4P DL Time Slot ISCP Info LCR

The *DL Time Slot ISCP Info LCR* IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Time Slot ISCP Info LCR		1 <maxno ofDLtsLCR</maxno 		
>Time Slot LCR	M		9.2.3.24A	
>DL Timeslot ISCP	M		9.2.3.4B	

Range Bound	Explanation
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps
	TDD.

## 9.2.3.4Q UpPCH Position LCR

The UpPCH Position LCR IE indicates the start point of the UpPCH channel , where the step size is 16chips, the maximum allowed value that can be utilised is 127\*16=2032chips, The reference point (UpPCH Position LCR =0) is the startpoint of the timeslot of UpPTS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UpPCH Position LCR			INTEGER (0127)	

### 9.2.3.5 DPCH ID

The DPCH ID identifies unambiguously a DPCH inside a Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPCH ID			INTEGER (0239)	

#### 9.2.3.5a DSCH ID

The DSCH ID uniquely identifies a DSCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DSCH ID			INTEGER (0255)	

# 9.2.3.5b DSCH Information Response

The DSCH Information Response IE provides information for DSCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DSCH Information Response		1 <maxno ofDSCHs&gt;</maxno 		
>DSCH ID	М		9.2.3.5a	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	

Range Bound	Explanation	
maxnoofDSCHs	Maximum number of DSCHs for one UE	

### 9.2.3.5A DSCH TDD Information

The DSCH TDD Information IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DSCH TDD Information		1 <max noofDS CHs&gt;</max 			_	
>DSCH ID	M		9.2.3.5a		_	
>CCTrCH ID	М		9.2.3.3	DL CCTrCH in which the DSCH is mapped	_	
>Transport Format Set	M		9.2.1.59	For DSCH	_	
>Allocation/Retention Priority	М		9.2.1.1A		_	
>Frame Handling Priority	M		9.2.1.30		_	
>ToAWS	M		9.2.1.61		_	
>ToAWE	M		9.2.1.60		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore

Range Bound	Explanation	
MaxnoofDSCHs	Maximum number of DSCH for one UE	

#### 9.2.3.5B DwPCH Power

DwPCH Power is the power that shall be used for transmitting the DwPCH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the DwPCH, the DwPCH power is the linear sum of the power that is used for transmitting the DwPCH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DwPCH Power			INTEGER	Unit: dBm
			(-150+400,)	Range: -15+40 dBm
				Step: 0.1 dB

### 9.2.3.5C Frame Adjustment Value

The Frame Adjustment Value IE represents the frame number correction within the initial synchronisation phase.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Adjustment Value			INTEGER (04095)	SFN <sub>new</sub> =(SFN <sub>old</sub> +Frame Adjustment Value) mod 4096

### 9.2.3.5D IPDL TDD Parameter

The *IPDL TDD Parameter* IE provides information about IPDL to be applied for 3.84Mcps TDD or 7.68Mcps TDD when activated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP SpacingTDD	М		ENUMERATED (30, 40, 50, 70, 100	See [21]

		)	
IP Start	M	INTEGER (04095)	See [21]
IP Slot	M	INTEGER (014)	See [21]
IP PCCPCH	M	ENUMERATED (	See [21]
		Switch off 1 frame,	
		Switch off 2 frames)	
Burst Mode parameters	0	9.2.1.5A	

### 9.2.3.5E Max FPACH Power

Max FPACH Power is the maximum power that shall be used for transmitting the FPACH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the FPACH, the Max FPACH Power is maximum of the linear sum of the power that is allowed for transmitting the FPACH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FPACH Power			INTEGER	Unit: dBm
			(-150+400,)	Range: -15+40 dBm
				Step: 0.1 dB

### 9.2.3.5F HS-DSCH TDD Information

The *HS-DSCH TDD Information* IE is used for initial addition of HS-DSCH information to a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d	М		9.2.1.31IA		-	-
Flows Information						
UE Capabilities		1			_	
Information						
>HS-DSCH Physical	М		9.2.1.31la		_	
Layer Category						_
>1.28 Mcps TDD	0		9.2.3.5Gc	Applicable to	YES	ignore
Uplink Physical				1.28Mcps TDD only		
Channel Capability						
>Number of	0		ENUMERATE	Applicable to	YES	reject
Supported Carriers			D (	1.28Mcps TDD only		
			One-one	This IE indicates the		
			carrier, One-	number of carrier that		
			three carrier,	UE can support at the same time, where		
			Three-three carrier, One-	'One-three carrier'		
			six carrier,	means the number of		
			Three-six	supported carrier is		
			carrier,	one for the uplink,and		
			Six-six carrier,	three for the downlink.		
			)	unce for the downlink.		
>Multi-carrier HS-	0		9.2.1.31la	Applicable to	YES	ignore
DSCH Physical Layer				1.28Mcps TDD only		8
Category						
>MIMO SF Mode	0		Enumerated	Applicable to	YES	ignore
Supported For HS-			(SF1,	1.28Mcps TDD only		
PDSCH dual stream			SF1/SF16)			
MAC-hs Reordering	M		9.2.1.38Ab		_	
Buffer Size for RLC-UM						
TDD ACK NACK	M		9.2.3.18F		_	
Power Offset						
HS-SICH SIR Target	0		UL SIR	Applicable to	YES	ignore
			9.2.1.67A	1.28Mcps TDD only		
HS-SICH TPC step	0		9.2.3.21a	Applicable to	YES	ignore
size				1.28Mcps TDD only		
HS-DSCH MAC-d PDU	0		9.2.1.31ID	If not present,	YES	reject
Size Format				"Indexed MAC-d PDU		
	_			Size" shall be used.		
TSN-Length	0		9.2.3.51	Applicable for	YES	reject
				1.28Mcps TDD when		
				using multiple		
			0044:5	frequencies	\/=0	
MIMO Activation	0		9.2.1.119		YES	reject
Indicator						

# 9.2.3.5G HS-DSCH TDD Information Response

The HS-DSCH TDD Information Response provides information for HS-DSCH MAC-d flows that have been established or modified. It also provides additional HS-DSCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d		0 <max< td=""><td></td><td>, , ,</td><td>_</td><td>,</td></max<>		, , ,	_	,
Flow Specific		noofMA				
Information		CdFlow				
Response		s>				
>HS-DSCH MAC-d	M		9.2.1.311		_	
Flow ID						
>Binding ID	0		9.2.1.4		_	
>Transport Layer	0		9.2.1.63		_	
Address >HS-DSCH Initial	0		9.2.1.31Ha			
	U		9.2.1.31Ha		_	
Capacity Allocation HS-SCCH Specific		0 <max< td=""><td></td><td>Not applicable to 1.20</td><td>GLOBAL</td><td>roicot</td></max<>		Not applicable to 1.20	GLOBAL	roicot
Information		NoOfHS		Not applicable to 1.28 Mcps TDD or	GLOBAL	reject
Response		SCCHc		7.68Mcps TDD		
1 toopened		odes>		7.00Mop0 122		
>Time Slot	М		9.2.3.23		_	
>Midamble Shift And	M		9.2.3.7		_	
Burst Type						
>TDD Channelisation	М		9.2.3.19		_	
Code						
>HS-SICH		1			_	
Information						
>>HS SICH ID	M		9.2.3.5Gb		_	
>>Time Slot	M		9.2.3.23		_	
>>Midamble Shift	M		9.2.3.7		_	
And Burst Type						
>>TDD	M		9.2.3.19		_	
Channelisation						
Code				<u> </u>		
HS-SCCH Specific		0 <max< td=""><td></td><td>Not applicable to 3.84</td><td>_</td><td></td></max<>		Not applicable to 3.84	_	
Information		HSDPA		Mcps TDD or		
Response LCR per UARFCN		Frequen		7.68Mcps TDD		
		cy> 1 <max< td=""><td></td><td>See note1 below  Not applicable to 3.84</td><td>GLOBAL</td><td>reject</td></max<>		See note1 below  Not applicable to 3.84	GLOBAL	reject
>HS-SCCH Specific		NoOfHS		Mcps TDD or	GLOBAL	reject
Information		SCCHc		7.68Mcps TDD		
Response LCR		odes>		7.00IVICPS 100		
>>Time Slot LCR	M	04007	9.2.3.24A		_	
>>Midamble Shift	M		9.2.3.7A		_	
LCR						
>>First TDD	М		TDD		_	
Channelisation			Channelisatio			
Code			n Code			
			9.2.3.19			
>>Second TDD	M		TDD			
Channelisation	1		Channelisatio			
Code	1		n Code			
110 01011	ļ		9.2.3.19			
>>HS-SICH	1	1			_	
Information LCR	NA.		9.2.3.5Gb	If the Extended HS-		
>>>HS SICH ID	М		9.2.3.5GD	SICH ID IE is included	_	
				in the HS-SICH		
	1			Information LCR IE,		
	1			the HS-SICH ID IE		
				shall be ignored.		
>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble	M		9.2.3.7A		_	
Shift LCR	1					
>>>TDD	М		9.2.3.19		_	
Channelisation	1					
Code	<u> </u>					
>>>Extended HS-	0		9.2.3.5K	The Extended HS-	YES	ignore
SICH ID	1			SICH ID IE shall be		
	l .	<u> </u>		used if the HS-SICH		

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				identity has a value larger than 31.		
>>UsedFrequency	0		UARFCN 9.2.1.65	Applicable for 1.28Mcps TDD when using multiple frequencies. this IE indicates the frequency which is actually used by the HS-SCCH.	YES	reject
>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable for 1.28Mcps TDD when using multiple frequencies. See note2 below	YES	ignore
HARQ Memory Partitioning per UARFCN		0 <max HSDPA Frequen cy&gt;</max 		See note 1 below	_	
>HARQ Memory Partitioning	0		9.2.1.102		-	
>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable for 1.28Mcps TDD when using multiple frequencies. See note2 below	YES	ignore
HS-SCCH Specific Information Response 7.68Mcps		0 <max NoOfHS SCCHc odes&gt;</max 		Not applicable to 3.84 Mcps TDD or 1.28Mcps TDD	GLOBAL	reject
>Time Slot	M	00032	9.2.3.23		_	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.35		_	
>Channelisation Code 7.68Mcps	M		TDD Channelisatio n Code 7.68Mcps 9.2.3.34		_	
>HS-SICH Information 7.68Mcps		1	0.2.0.01		_	
>>HS SICH ID	M		9.2.3.5Gb			
>>Time Slot >>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.23 9.2.3.35		_	
>>Channelisation Code 7.68Mcps	M		TDD Channelisatio n Code 7.68Mcps 9.2.3.34		-	
Multi-Carrier number	0		INTEGER(1 maxHSDPAFr equency)	Applicable for 1.28Mcps TDD when using multiple frequencies.	YES	ignore
MIMO SF Mode for HS- PDSCH dual stream	0		Enumerated (SF1, SF1/SF16)	Applicable for 1.28Mcps TDD when MIMO is configured	YES	reject
MIMO Reference Signal Information	0	0 <max NoOfHS SCCHc</max 		Applicable for 1.28Mcps TDD when MIMO is configured	YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
		odes>				
>HS-SICH Reference Signal Information	М		9.2.3.103		YES	

Note 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxHSDPAFrequency are represented by separate ASN.1 structures with different criticalities.

Note 2: The UARFCN IE in the HARQ Memory Partitioning per UARFCN IE has the same content as that in the HS-SCCH Specific Information Response LCR per UARFCN IE. They will be represented by one ASN.1 structure with same criticalities

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows.
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes
maxHSDPAFrequency	Maximum number of Frequencies that UE can support

### 9.2.3.5GA HS-DSCH TDD Update Information

The *HS-DSCH TDD Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change Indicator	0		9.2.1.31K	
TDD ACK NACK Power Offset	0		9.2.3.18F	

### 9.2.3.5Ga HS-SCCH ID

The HS-SCCH ID identifies unambiguously a HS-SCCH and its paired HS-SICH within the set of HS-SCCHs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS SCCH ID			INTEGER (031)	

### 9.2.3.5Gb HS-SICH ID

The HS-SICH ID identifies unambiguously a HS-SICH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS SICH ID			INTEGER (031)	

### 9.2.3.5Gc 1.28 Mcps TDD Uplink Physical Channel Capability

The 1.28 Mcps TDD Uplink Physical Channel Capability IE defines the UE uplink radio access capacity, see ref [33].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of	М		INTEGER	
timeslots per subframe			(16)	
Maximum number of physical	М		ENUMERATED	
channels per timeslot			(one, two,, three, four)	

## 9.2.3.5H IPDL TDD Parameters LCR

The IPDL TDD Parameters LCR IE provides information about IPDL to be applied for 1.28Mcps TDD when activated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP SpacingTDD	M		ENUMERATED (30, 40, 50, 70, 100,)	See [21]
IP Start	M		INTEGER (04095)	See [21]
IP_Sub	М		ENUMERATED ( First, Second, Both)	See [21]
Burst Mode Parameters	0		9.2.1.5A	

# 9.2.3.5I TSN-Length

Indicates the TSN bits applied to the MAC-hs PDU frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSN-Length			ENUMERATED (tsn-	
			6bits, tsn-9bits)	

## 9.2.3.5J Extended HS-SCCH ID

The Extended HS-SCCH ID LCR identifies unambiguously a HS-SCCH and its paired HS-SICH within the set of HS-SCCHs in a cell for 1.28Mcps TDD.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description
Extended HS-SCCH ID			INTEGER(32255)	The Extended HS-SCCH ID IE shall be used if the HS-SCCH identity has a value larger than 31.

## 9.2.3.5K Extended HS-SICH ID

The Extended HS-SICH ID LCR identifies unambiguously a HS-SICH in a cell for 1.28Mcps TDD

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description
Extended HS-SICH ID			INTEGER(32255)	The Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.

### 9.2.3.6 Max PRACH Midamble Shift

Indicates the maximum number of Midamble shifts to be used in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max PRACH Midamble Shift			ENUMERATED (4, 8,,16)	

## 9.2.3.7 Midamble Shift And Burst Type

This information element indicates burst type and midamble allocation for burst types 1, 2 and 3.

The 256 chip midamble supports 3 different time shifts, the 512 chips midamble may support 8 or even 16 time shifts.

Three different midamble allocation schemes exist:

Default midamble: the midamble is allocated by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble is allocated by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Burst Type				
>Type1				
>>Midamble Configuration Burst Type 1 And 3	М		ENUMERATED (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (015)	
>Type2			, ,	
>>Midamble Configuration Burst Type 2	М		ENUMERATED (3, 6)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Short	M		INTEGER (05)	
>Type3				UL only
>>Midamble Configuration Burst Type 1 And 3	М		ENUMERATED (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (015)	

## 9.2.3.7A Midamble Shift LCR

This information element indicates midamble allocation in 1.28Mcps TDD.

Three different midamble allocation schemes exist:

Default midamble: the midamble is allocated by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble is allocated by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Midamble Allocation Mode	M		ENUMERATED ( Default midamble, Common midamble, UE specific midamble,)	
Midamble Shift Long	C-UE		INTEGER (015)	
Midamble Configuration LCR	M		ENUMERATED (2, 4, 6, 8, 10, 12, 14, 16,)	As defined in [19]

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation Mode IE is set to
	"UE-specific midamble".

## 9.2.3.7Aa Notification Indicator Length

The Notification Indicator Length indicates the number of symbols for Notification Indication transmitted in one timeslot (see ref [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Notification Indicator Length			ENUMERATED (2, 4, 8,)	

# 9.2.3.7B Number Of Cycles Per SFN Period

The *Number Of Cycles Per SFN Period* IE indicates the number of repetitions per SFN period where the same schedule shall apply.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Cycles Per SFN			ENUMERATED	
Period			(1, 2, 4, 8,,	
			16, 32, 64)	

## 9.2.3.7C Number Of Repetitions Per Cycle Period

The *Number Of Repetitions Per Cycle Period* IE indicates the number of Sync frames per Cycle Length where the [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD - Sync\_DL Codes] shall be transmitted or the cell synchronisation bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Repetitions Per			INTEGER (210)	
Cycle Period				

# 9.2.3.7D Number Of Subcycles Per Cycle Period

The *Number Of Subcycles Per Cycle Period* IE indicates the number of subcycles within a Synchronisation Cycle. Within each subcycle, the same sequence of SYNC\_DL Code transmissions and receptions is performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Subcycles Per Cycle Period			INTEGER (116,)	

# 9.2.3.8 Paging Indicator Length

The Paging Indicator Length indicates the number of symbols for Page Indication transmitted in one timeslot (see ref [19]).

Presence	Range	IE Type and Reference	Semantics Description
		ENUMERATED	
	resence	Teserice Kange	Reference

#### 9.2.3.9 PCCPCH Power

The Primary CCPCH power is the power that shall be used for transmitting the P CCPCH in a cell. The P CCPCH power is the reference power in a TDD-cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CCPCH, the Primary CCPCH power is the linear sum of the power that is used for transmitting the Primary CCPCH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCCPCH Power			INTEGER	Unit: dBm
			(-150+400,)	Range: -15+40 dBm
				Step: 0.1 dB

#### 9.2.3.10 PDSCH ID

The PDSCH ID identifies unambiguously a PDSCH inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH ID			INTEGER (0255)	

#### 9.2.3.11 PDSCH Set ID

The PDSCH Set Id identifies unambiguously a PDSCH Set inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH Set ID			INTEGER (0255)	See ref. [6]

## 9.2.3.11A Primary CCPCH RSCP

Received Signal Code Power is the received power on PCCPCH of the target cell after despreading. The reference point for the RSCP is the antenna connector at the UE, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CCPCH RSCP			INTEGER (091)	According to mapping of the non-negative values in ref. [23].

### 9.2.3.11B Primary CCPCH RSCP Delta

Primary CCPCH RSCP Delta is the offset used to report the negative reporting range of P-CCPCH RSCP as per [23].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CCPCH RSCP Delta			INTEGER(-51,)	If present, the actual value of Primary CCPCH RSCP =
				Primary CCPCH RSCP Delta

### 9.2.3.12 PUSCH ID

The PUSCH ID identifies unambiguously a PUSCH inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PUSCH ID			INTEGER (0255)	

### 9.2.3.13 PUSCH Set ID

The PUSCH Set ID identifies unambiguously a PUSCH Set inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PUSCH Set ID			INTEGER (0255)	See ref. [6]

# 9.2.3.14 PRACH Midamble

The PRACH Midamble indicates if only the Basic Midamble Sequence or also the time-inverted Midamble Sequence is used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PRACH Midamble			ENUMERATED ( Inverted,	
			Direct,)	

# 9.2.3.14A Reference Clock Availability

The *Reference Clock Availability* IE is used to indicate the presence and operating of a Reference Clock connected to a TDD cell for cell synchronisation purpose.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Clock Availability			ENUMERATED ( Available, Not Available)	

### 9.2.3.14B Reference SFN Offset

The *Reference SFN Offset* IE indicates the number of frames the reference SFN shall be shifted compared to the SFN derived from the synchronisation port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference SFN Offset			INTEGER (0255)	

## 9.2.3.15 Repetition Length

The Repetition Length represents the number of consecutive Radio Frames inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see ref. [18].

[1.28Mcps TDD - When applied to configure the E-DCH Non-scheduled Grant Information, the Repetition Length represents the number of consecutive Subframes, i.e. 5ms inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see ref. [18].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Length			INTEGER (163)	

### 9.2.3.16 Repetition Period

The Repetition Period represents the number of consecutive Radio Frames after which the same assignment scheme of Time Slots to a Physical Channel is repeated. This means that if the Time Slot K is assigned to a physical channel in the Radio Frame J, it is assigned to the same physical channel also in all the Radio Frames J+n\*Repetition Period (where n is an integer) see ref. [18].

[1.28Mcps TDD- When applied to configure the E-DCH Non-scheduled Grant Information, the Repetition Period represents the number of consecutive Subframes, i.e. 5ms after which the same assignment scheme of Time Slots to a Physical Channel is repeated see ref. [18].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period			ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	

#### 9.2.3.17 SCH Time Slot

The *SCH Time Slot* IE represents the first time slot (k) of a pair of time slots inside a Radio Frame that shall be assigned to the Physical Channel SCH. The *SCH Time Slot* IE is only applicable if the value of *Sync Case* IE is Case 2 since in this case the SCH is allocated in TS#k and TS#k+8.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCH Time Slot			INTEGER (06)	

### 9.2.3.18 Sync Case

The SCH and PCCPCH are mapped on one or two downlink slots per frame. There are two cases of SCH and PCCPCH allocation as follows:

Case 1) SCH and PCCPCH allocated in a single TS#k

Case 2) SCH allocated in two TS: TS#k and TS#k+8 PCCPCH allocated in TS#k

[1.28Mcps TDD - There is no Sync Case indication needed for 1.28Mcps TDD. If the *Sync Case* IE must be included in a message from CRNC to Node B used for 1.28Mcps TDD, the CRNC should indicate Sync Case 1 and the Node B shall ignore it.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Case			INTEGER (12,)	

# 9.2.3.18A Special Burst Scheduling

The number of frames between special burst transmissions during DTX.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Special Burst Scheduling			INTEGER (1256)	Number of frames between special burst transmission during DTX

### 9.2.3.18B SYNC\_DL Code ID

The SYNC\_DL Code ID identifies the SYNC\_DL Code which used by DwPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SYNC_DL Code ID			INTEGER (132,)	

## 9.2.3.18C Sync Frame Number

The *Sync Frame Number* IE indicates the number of the Sync frame within a Synchronisation Cycle or Subcycle, respectively, where the cell synchronisation bursts shall be transmitted or the cell synchronisation bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Frame Number			INTEGER (110)	

# 9.2.3.18D Synchronisation Report Characteristics

The *Synchronisation Report Characteristics* IE defines how the reporting on measured [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD - Sync\_DL Codes] shall be performed

Different methods shall apply for the measured [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD - Sync\_DL Codes] reports. [3.84Mcps TDD - In the frequency acquisition phase the measurement report shall be sent when the frequency locking is completed.] In the initial phase and for the measurement on late-entrant cells an immediate report after the measured frame is expected.

In the steady-state phase measurement reports may be given after every measured frame, after every SFN period, after every cycle length or only when the requested threshold is exceeded.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Synchronisation Report Characteristics Type	M		ENUMERATED ( Frame related, SFN period related, Cycle length related, Threshold exceeding, Frequency Acquisition completed,)		-	
Threshold Exceeding	C- Threshol dExceedi ng			Applies only to the Steady State Phase	_	
>Cell Sync Burst Threshold Information		0 <maxn oofCellSy ncBursts &gt;</maxn 		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	-	

>>Sync Frame Number To Receive	М		Sync Frame Number 9.2.3.18C		-	
>>Cell Sync Burst Information		1 <maxn oofrecept ionsperS yncFram e&gt;</maxn 			_	
>>>Cell Sync Burst Code	М		9.2.3.4G		_	
>>>Cell Sync Burst Code Shift	М		9.2.3.4H		-	
>>>Cell Sync Burst Arrival Time	0		Cell Sync Burst Timing 9.2.3.4L		-	
>>>Cell Sync Burst Timing Threshold	0		9.2.3.4M		_	
>SYNC_DL Code Threshold Information LCR		0 <maxn oofSyncF ramesLC R&gt;</maxn 		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	GLOBAL	ignore
>>Sync Frame Number To Receive	M		Sync Frame Number 9.2.3.18C		_	
>>SYNC_DL Code Information LCR		1 <maxn oofrecept ionsperS yncFram eLCR&gt;</maxn 			-	
>>>SYNC_DL Code	М		9.2.3.18B		_	
>>>SYNC_DL Code ID Arrival Time	0		Cell Sync Burst Timing LCR 9.2.3.4La		-	
>>>SYNC_DL Code ID Timing Threshold	0		Cell Sync Burst Timing Threshold 9.2.3.4M		-	

Range Bound	Explanation
maxnoofCellSyncBursts	Maximum number of cell synchronisation burst per cycle for 3.84Mcps TDD
maxnoofreceptionsperSyncFrame	Maximum number of cell synchronisation burst receptions per Sync Frame for 3.84Mcps TDD
maxnoofSyncFramesLCR	Maximum number of SYNC Frames per repetition period for 1.28Mcps TDD
maxnoofreceptionsperSyncFrameLCR	Maximum number of SYNC_DL Code ID receptions per Sync Frame for 1.28Mcps TDD

# 9.2.3.18E Synchronisation Report Type

The *Synchronisationt Report Type* IE represents the individual types of synchronisation reports that shall apply within the individual synchronisation phases. (see [17]).

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Synchronisation Report Type			ENUMERATED (	
			Initial Phase,	
			Steady-State Phase,	
			Late-Entrant Cell,	
			Frequency	
			Acquisition,	
			)	

#### 9.2.3.18F TDD ACK NACK Power Offset

The *TDD ACK NACK Power Offset* IE indicates Power offset used in the UL in the HS-SICH between transmissions carrying positive and negative acknowledgements as per [18].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TDD ACK NACK Power Offset			INTEGER (-78,)	Unit: dB
				Range: -7+8 dB
				Step: 1 dB

### 9.2.3.19 TDD Channelisation Code

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code, that can have a spreading factor of 1, 2, 4, 8 or 16.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code			ENUMERATED ( (1/1), (2/1), (2/2), (4/1), (4/4), (8/1), (8/8), (16/1), (16/16),)	

#### 9.2.3.19a TDD Channelisation Code LCR

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In 1.28Mcps TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code, that can have a spreading factor of 1, 2, 4, 8 or 16 and there is a choice between QPSK and 8PSK modulation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code			9.2.3.19	
Modulation			ENUMERATED (QPSK, 8PSK,)	Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD. 8PSK denotes 16QAM for S-CCPCH

### 9.2.3.19A TDD DPCH Offset

The Offset represents the phase information for the allocation of a group of dedicated physical channels. The *Offset Type* IE = "No Initial Offset" is used when a starting offset is not required and the TDD Physical channel offset for each DPCH in the CCTrCH shall be directly determined from the TDD DPCH Offset. The *Offset Type* IE = "Initial Offset" is used when a starting offset is required. The TDD DPCH Offset shall map to the CFN and the TDD Physical Channel Offet for each DPCH in this CCTrCH shall calculated by TDD DPCH Offset *mod* Repetition period, see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Offset Type				
>Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (0255)	
>No Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (063)	

### 9.2.3.19B TDD DL Code Information

The TDD DL Code Information IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD DL Code Information		1 <maxno ofDPCHs&gt;</maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code	M		9.2.3.19	

Range Bound	Explanation
maxnoofDPCHs	Maximum number of DPCHs in one CCTrCH

## 9.2.3.19C TDD DL Code Information LCR

The TDD DL Code Information LCR IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD DL Code Information LCR		1 <maxno ofDPCHsL CR&gt;</maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code LCR	М		9.2.3.19a	
>TDD DL DPCH Time Slot Format LCR	М		9.2.3.19D	

Range Bound	Explanation
maxnoofDPCHsLCR	Maximum number of DPCH in one CCTrCH for 1.28Mcps TDD

## 9.2.3.19D TDD DL DPCH Time Slot Format LCR

TDD DL DPCH Time Slot Format LCR indicates the time slot formats used in DL DPCH for 1.28Mcps TDD (see ref. [19]). It also applies to PDSCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
CHOICE Modulation	M			
>QPSK				
>>QPSK TDD DL DPCH	M		INTEGER	
Time Slot Format LCR			(024,)	
>8PSK				
>>8PSK TDD DL DPCH	M		INTEGER	For 1.28 Mcps TDD, if the cell
Time Slot Format LCR			(024,)	is operating in MBSFN only
				mode, this IE denotes MBSFN
				S-CCPCH time slot format,
				INTEGER (011,).

# 9.2.3.20 TDD Physical Channel Offset

The Offset represents the phase information for the allocation of a physical channel. (SFN mod Repetition Period = Offset) see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Physical Channel Offset			INTEGER (063)	

# 9.2.3.21 TDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Downlink Step Size			ENUMERATED (1, 2, 3,)	Unit: dB

# 9.2.3.21a TDD TPC UL Step Size

This parameter indicates step size for the UL power adjustment (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Uplink Step Size			ENUMERATED (1, 2, 3,)	Unit: dB

## 9.2.3.21A TDD UL Code Information

The TDD UL Code Information IE provides information for UL Code to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD UL Code Information		1 <maxno ofDPCHs&gt;</maxno 		
>DPCH ID	М		9.2.3.5	
>TDD Channelisation Code	M		9.2.3.19	

Range Bound	Explanation
maxnoofDPCHs	Maximum number of DPCHs in one CCTrCH

## 9.2.3.21B TDD UL Code Information LCR

The TDD UL Code Information LCR IE provides information for UL Code to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD UL Code Information LCR		1 <maxno ofDPCHsL CR&gt;</maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code LCR	М		9.2.3.19a	
>TDD UL DPCH Time Slot Format LCR	М		9.2.3.21C	

Range Bound	Explanation		
maxnoofDPCHsLCR	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD		

## 9.2.3.21C TDD UL DPCH Time Slot Format LCR

TDD UL DPCH Time Slot Format LCR indicates the time slot formats used in UL DPCH for 1.28Mcps TDD (see ref. [19]). It also applies to PUSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Modulation	М			
>QPSK				
>>QPSK TDD UL DPCH Time Slot Format LCR	M		INTEGER (069,)	
>8PSK				
>>8PSK TDD UL DPCH Time Slot Format LCR	M		INTEGER (024,)	

## 9.2.3.22 TFCI Coding

The TFCI Coding describes the way how the TFCI bits are coded. By default 1 TFCI bit is coded with 4 bits, 2 TFCI bits are coded with 8 bits, 3-5 TFCI bits are coded with 16 bits and 6-10 TFCI bits are coded with 32 bits.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Coding			ENUMERATED	
			(4, 8, 16, 32,)	

## 9.2.3.22a Timing Adjustment Value

The *Timing Adjustment Value* IE indicates the timing correction within a Frame for 3.84Mcps TDD. Type 1 is used for the initial phase of Node B synchronisation. Type 2 is used for the steady-state phase of Node B synchronisation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Timing Adjustment Value	М		INTEGER (01048575,)	
>Steady State Phase				
>>Timing Adjustment Value	М		INTEGER (0255,)	

## 9.2.3.22b Timing Adjustment Value LCR

The *Timing Adjustment Value LCR* IE indicates the timing correction within a Frame for 1.28Mcps TDD. Type 1 is used for the initial phase of Node B synchronisation. Type 2 is used for the steady-state phase of Node B synchronisation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Timing Adjustment Value	M		INTEGER (0 524287,)	
>Steady State Phase				
>>Timing Adjustment Value	М		INTEGER (0127)	

# 9.2.3.22A Timing Advance Applied

Defines the need for Rx Timing Deviation measurement results to be reported in a particular cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timing Advance Applied			ENUMERATED (	
			Yes,	
			No)	

## 9.2.3.23 Time Slot

The Time Slot represents the minimum time interval inside a Radio Frame that can be assigned to a Physical Channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot			INTEGER (014)	

## 9.2.3.24 Time Slot Direction

This parameter indicates whether the TS in the cell is used in Uplink or Downlink direction.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Direction			ENUMERATED (	
			UL,	
			DL,	
			)	

### 9.2.3.24A Time Slot LCR

The Time Slot LCR is the number of the traffic time slot within a 5 ms subframe of LCR TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot LCR			INTEGER (06)	

### 9.2.3.24B Time Slot LCR Extension

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot LCR Extension			ENUMERATED (ts7,)	ts7 indicates the MBSFN Special Timeslot for 1.28Mcps TDD MBSFN Dedicated Carrier.

### 9.2.3.25 Time Slot Status

This parameter indicates whether the TS in the cell is active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Status			ENUMERATED (	
			Active,	
			Not Active,	
			)	

# 9.2.3.26 Transmission Diversity Applied

Defines if Transmission Diversity on physical channels that may use closed loop transmit diversity is to be applied in a cell (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Diversity Applied			BOOLEAN	True: Transmission Diversity shall be applied in this Cell. False: Transmission Diversity shall not be applied in this Cell.

### 9.2.3.26A UL Timeslot ISCP

UL Timeslot ISCP is the measured interference in a uplink timeslot at the Node B, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot ISCP			INTEGER (0127)	According to mapping in [23].

# 9.2.3.26B UL PhysCH SF Variation

Indicates whether variation of SF in UL is supported by Radio Link or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL PhysCH SF Variation			ENUMERATED ( SF_Variation_supported, SF_Variation_NOT_ supported)	

### 9.2.3.26C UL Timeslot Information

The UL Timeslot Information IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot Information		1 <maxno ofULts&gt;</maxno 		
>Time Slot	M		9.2.3.23	
>Midamble Shift And Burst Type	М		9.2.3.7	
>TFCI Presence	М		9.2.1.57	
>UL Code Information	M		TDD UL Code Information 9.2.3.21A	

Range Bound	Explanation
maxnoofULts	Maximum number of Uplink time slots per Radio Link

## 9.2.3.26D UL Time Slot ISCP Info

The UL Time Slot ISCP Info IE provides information for UL Interfernce level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Time Slot ISCP Info		1 <maxno ofULts&gt;</maxno 		
>Time Slot	M		9.2.3.23	
>UL Timeslot ISCP	M		9.2.3.26A	

Range Bound	Explanation
maxnoofULts	Maximum number of Uplink time slots per Radio Link

## 9.2.3.26E UL Timeslot Information LCR

The *UL Timeslot Information* IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Timeslot Information LCR		1 <maxno ofULtsLCR &gt;</maxno 			_	
>Time Slot LCR	M		9.2.3.24A		_	
>Midamble Shift LCR	M		9.2.3.7A		_	
>TFCI Presence	M		9.2.1.57		_	
>UL Code Information	М		TDD UL Code Information LCR 9.2.3.21B		-	
>PLCCH Information	0		9.2.3.31		YES	reject

Range Bound	Explanation
maxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD.

## 9.2.3.26F UL Time Slot ISCP Info LCR

The *UL Time Slot ISCP Info LCR* IE provides information for UL Interfernce level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Time Slot ISCP Info LCR		1 <maxno ofULtsLCR &gt;</maxno 		
>Time Slot LCR	M		9.2.3.24A	
>UL Timeslot ISCP	M		9.2.3.26A	

Range Bound	Explanation	
maxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcp	
	TDD	

# 9.2.3.26G Uplink Synchronisation Frequency

The UL Synchronisation Frequency IE specifies the frequency of the adjustment of the uplink transmission timing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink Synchronisation			INTEGER (18)	Unit: subframe
Frequency				Step: 1

# 9.2.3.26H Uplink Synchronisation Step Size

The *UL Synchronisation Step Size* IE specifies the step size to be used for the adjustment of the uplink transmission timing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink Synchronisation Step Size			INTEGER (18)	Unit: 1/8 chip Step: 1.

### 9.2.3.27 USCH ID

The USCH ID uniquely identifies a USCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
USCH ID			INTEGER (0255)	

## 9.2.3.28 USCH Information

The USCH Information IE provides information for USCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
USCH Information		1 <max noofUS CHs&gt;</max 			_	
>USCH ID	M		9.2.3.27		-	
>CCTrCH ID	М		9.2.3.3	UL CCTrCH in which the USCH is mapped	_	
>Transport Format Set	М		9.2.1.59	For USCH	_	
>Allocation/Retention Priority	М		9.2.1.1A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.58A		YES	ignore

Range Bound	Explanation
maxnoofUSCHs	Maximum number of USCHs for one UE

# 9.2.3.29 USCH Information Response

The USCH Information Response IE provides information for USCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
USCH Information Response		1 <maxno ofUSCHs&gt;</maxno 		
>USCH ID	М		9.2.3.27	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	

Range Bound	Explanation
maxnoofUSCHs	Maximum number of USCHs for one UE

### 9.2.3.30 SCTD Indicator

Indicates if SCTD antenna diversity is applied or not to beacon channels (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCTD Indicator			ENUMERATED (	
			active,	
			inactive)	

### 9.2.3.31 PLCCH Information

The PLCCH Information IE carries a PLCCH assignment for a timeslot of an UL DCH-type CCTrCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID	M		9.2.1.13	
PLCCH Sequence Number	М		9.2.3.32	

### 9.2.3.32 PLCCH Sequence Number

This sequence number represents a portion of a PLCCH used to signal TPC / SS bits to a single UE. A value of zero indicates that the PLCCH assignment has been deleted.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLCCH Sequence Number			INTEGER (014)	

## 9.2.3.33 Common Physical Channel ID 7.68Mcps

Common Physical Channel ID is the unique identifier for one common physical channel within a cell for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID 7.68 Mcps			INTEGER (0511)	

## 9.2.3.34 TDD Channelisation Code 7.68Mcps

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In 7.68Mcps TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code that can have a spreading factor of 1, 2, 4, 8, 16 or 32.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
TDD Channelisation Code			ENUMERATED((1/1	
			), (2/1), (2/2), (4/1),	
			(4/4), (8/1), (8/8),	
			(16/1), (16/16),	
			(32/1), (32,32),)	

# 9.2.3.35 Midamble Shift And Burst Type 7.68Mcps

This information element indicates burst type and midamble allocation for burst types 1,2 and 3 for 7.68Mcps TDD.

Three different midamble allocation schemes exist:

Default midamble: the midamble is allocated by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble is allocated by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Burst Type				
>Type1				
>>Midamble Configuration Burst Type 1 And 3	М		ENUMERATED (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (015)	
>Type2				
>>Midamble Configuration Burst Type 2	М		ENUMERATED (4, 8)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Short	M		INTEGER (07)	
>Type3				UL only
>>Midamble Configuration Burst Type 1 And 3	М		ENUMERATED (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (015)	

# 9.2.3.36 Common Physical Channel Status Information 7.68Mcps

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID 7.68 Mcps	M		9.2.3.33	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

# 9.2.3.37 Neighbouring TDD Cell Measurement Information 7.68Mcps

This IE provides information on the 7.68 Mcps TDD neighbouring cells used for the purpose of measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time Slot* IE and *Midamble Shift And Burst Type 7.68Mcps* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time Slot	0		9.2.3.23	
Midamble Shift And Burst Type	0		9.2.3.35	
7.68Mcps				

## 9.2.3.38 UL Timeslot Information 7.68Mcps TDD

The UL Timeslot Information IE provides information on the time slot allocation for an UL DPCH for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot Information		1 <maxno ofULts&gt;</maxno 		
>Time Slot	M		9.2.3.23	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.35	
>TFCI Presence	M		9.2.1.57	
>UL Code Information	М		TDD UL Code Information 7.68Mcps TDD 9.2.3.40	

Range Bound	Explanation
maxnoofULts	Maximum number of Uplink time slots per Radio Link

# 9.2.3.39 DL Timeslot Information 7.68Mcps TDD

The DL Timeslot Information IE provides information for DL Time slot to be established for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot Information		1 <maxno ofDLts&gt;</maxno 		
>Time Slot	M		9.2.3.23	
>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.35	
>TFCI Presence	M		9.2.1.57	
>DL Code Information	М		TDD DL Code Information 7.68Mcps TDD 9.2.3.41	

Range Bound	Explanation
maxnoofDLts	Maximum number of Downlink time slots per Radio Link

## 9.2.3.40 TDD UL Code Information 7.68Mcps TDD

The *TDD UL Code Information 7.68Mcps TDD* IE provides information for UL Code to be established for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD UL Code Information		1 <maxno ofDPCHs&gt;</maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.34	

Range Bound	Explanation
maxnoofDPCHs	Maximum number of uplink DPCHs in one CCTrCH at 7.68Mcps

# 9.2.3.41 TDD DL Code Information 7.68Mcps TDD

The TDD Code Information 7.68Mcps TDD IE provides DL Code information for the RL for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD DL Code Information		1 <maxno ofDPCHs7 68&gt;</maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.34	

Range Bound	Explanation
maxnoofDPCHs768	Maximum number of downlink DPCHs in one CCTrCH at 7.68Mcps

## 9.2.3.42 DPCH ID 7.68Mcps

The DPCH ID 7.68Mcps identifies unambiguously a DPCH inside a downlink Radio Link for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPCH ID			INTEGER (0479)	

# 9.2.3.43 PDSCH ID 7.68Mcps

The PDSCH ID 7.68Mcps identifies unambiguously a PDSCH inside a cell for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH ID			INTEGER (0511)	

### 9.2.3.44 Max E-RUCCH Midamble Shift

Indicates the maximum number of Midamble shifts to be used in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max E-RUCCH Midamble Shift			ENUMERATED (4, 8,,16)	

## 9.2.3.45 E-PUCH Information

The *E-PUCH Information* IE provides parameters to configure the E-PUCH physical channel for 3.84Mcps TDD and 7.68 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum code rate	M		INTEGER (063)	Unit: - Range: 0.0551 Step: 0.015
Maximum code rate	M		INTEGER (063)	Unit: - Range: 0.0551 Step: 0.015
HARQ Info for E-DCH	M		ENUMERATED (rv0, rvtable)	'rv0' indicates that the UE will only use E_DCH RV index 0. 'rvtable' indicates that the UE will use an RSN based RV index as specified in [8]
N <sub>E-UCCH</sub>	М		INTEGER (112)	Number of slots that are required to carry TPC and TFCI (consecutively allocated slots beginning with the first).

# 9.2.3.45a E-PUCH Information LCR

The *E-PUCH Information LCR* IE provides parameters to configure the E-PUCH physical channel for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Minimum code rate	M		INTEGER	Unit: -	_	
			(063)	Range: 0.055 1		
				Step: 0.015		
Maximum code rate	М		INTEGER	Unit: -	_	
Waximum code rate	IVI		(063)	Range: 0.055		
			(000)	1		
				Step: 0.015		
HARQ Info for E-DCH	M		ENUMERA	'rv0' indicates	_	
			TED (rv0,	that the UE		
			rvtable)	will only use		
				E_DCH RV		
				index 0.		
				'rvtable' indicates that		
				the UE will use		
				an RSN based		
				RV index as		
				specified in [8]		
PRXdes_base	М		INTEGER	dBm.	_	
_			(-11250)	Reference		
				Desired RX		
				power level for		
				E-PUCH.		
				Reference to		
E-PUCH TPC Step Size	M		TDD TPC	Pe-base in [21]	_	
2 1 0011 11 0 0top 0120	""		UL Step			
			Size			
			9.2.3.21a			
E-AGCH TPC Step Size	M		TDD TPC		_	
			DL Step			
			Size			
			9.2.3.21		\/=0	
E-PUCH Power Control GAP	0		INTEGER	Unit: Number of	YES	ignore
			(1255)	subframes.		
				Reference to E- PUCH Power		
				Control for		
				1.28Mcps TDD		
				in [21]. If it is		
				not present, UE		
				shall deem it to		
				be infinite in		
				which case		
				closed loop		
				power control		
				shall always be		
			]	used.		

# 9.2.3.46 E-TFCS Information TDD

Whereas the related E-DCH Transport Block sizes are standardised in [32] this IE gives details on the Reference Betas.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Beta Information QPSK		1 <maxno ofRefbeta s&gt;</maxno 		
>Reference Code Rate	М		INTEGER (010)	Unit: - Range: 01 Step: 0.1
>Reference Beta	M		INTEGER(-1516)	Unit: - Range: -15+16 Step: 1 dB
Reference Beta Information 16QAM		1 <maxno ofRefbeta s&gt;</maxno 		
>Reference Code Rate	М		INTEGER (010)	Unit: - Range: 01 Step: 0.1
>Reference Beta	M		INTEGER(-1516)	Unit: - Range: -15+16 Step: 1 dB

Range Bound	Explanation
maxnoofRefbetas	Maximum number of signalled reference betas

## 9.2.3.47 E-DCH MAC-d Flows Information TDD

The E-DCH MAC-d Flows Information TDD IE is used for the establishment of E-DCH MAC-d flows for TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows &gt;</maxno 		
>E-DCH MAC-d Flow ID	M		9.2.1.74	
>Allocation/Retention Priority	M		9.2.1.1A	
>TNL QoS	0		9.2.1.58A	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>Payload CRC Presence Indicator	М		9.2.1.49	
>Maximum Number Of Retransmissions For E-DCH	М		9.2.1.81	
>E-DCH HARQ Power Offset TDD	М		9.2.3.61	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69	
>E-DCH Grant TypeTDD	М		9.2.3.53	
>E-DCH Logical Channel Information	М		9.2.1.71	
>E-DCH MAC-d Flow Retransmission Timer	0		9.2.3.61a	Mandatory for LCR TDD. Not applicable for 3.84Mcps TDD and 7.68Mcps TDD.

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

# 9.2.3.48 E-DCH Non-scheduled Grant Information TDD

The E-DCH Non-scheduled Grant Information TDD IE is used to specify the details of a non-scheduled grant for TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information	M		9.2.3.54	
Power Resource Related Information	M		9.2.3.55	
Repetition Period	M		9.2.3.16	
Repetition Length	M		9.2.3.15	
TDD E-PUCH Offset	M	•	9.2.3.56	
TDD Channelisation Code	M	•	9.2.3.19	

# 9.2.3.48a E-DCH Non-scheduled Grant Information LCR TDD

Only for 1.28Mcps TDD. The *E-DCH Non-scheduled Grant Information LCR TDD* IE is used to specify the details of a non-scheduled grant for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Timeslot Resource Related	М		9.2.3.54a		_	
Information LCR			0.0055			
Power Resource Related	М		9.2.3.55		_	
Information Repetition Period	M		0.0.0.16			
	M		9.2.3.16 9.2.3.15		_	
Repetition Length Subframe Number	M		ENUMERA	Used to	_	
	N.		TED ( 0,1)	indicate from which subframe of the Radio Frame indicated by TDD E-PUCH Offset IE the physical resources are assigned to the E-DCH Nonscheduled Grant.		
TDD E-PUCH Offset	M		9.2.3.56		_	
TDD Channelisation Code	M		9.2.3.19		_	
Ne-ucch	М		INTEGER (18)	Number of E- UCCH and TPC instances within an E-DCH TTI. Details are described in [19].	-	
E-HICH Information		1				
>E-HICH ID TDD	М		9.2.3.51a	If the Extended E-HICH ID TDD IE is included in the E-HICH Information IE, the E-HICH ID TDD IE shall be ignored.	-	
>Signature Sequence Group Index	М		INTEGER (019)		_	
>Extended E-HICH ID TDD	0		9.2.3.51b	Applicable to 1.28Mcps TDD only, the Extended E- HICH ID TDD IE shall be used if the E-HICH identity has a value larger than 31.	YES	ignore

# 9.2.3.49 E-DCH TDD Information

The *E-DCH TDD Information* specifies the details of the maximum bit rate and processing overload level.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum Bitrate	0		9.2.3.57	
E-DCH Processing Overload Level	0		9.2.1.79	
E-DCH Power Offset for Scheduling Info	0		9.2.1.85	

## 9.2.3.49a E-DCH TDD Information LCR

Only for 1.28Mcps TDD. The *E-DCH TDD Information LCR* IE specifies the details of the UE physical layer category, Node B processing overload level and power offset, Maximum Number of Retransmission and E-DCH Retransmission timer for scheduling info. The *E-AGCH Inactivity Monitor Threshold* IE is used for E-AGCH channel monitoring control for scheduled transmission.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Physical Layer Category LCR	0		9.2.3.67	If the Extended E-DCH Physical Layer Category LCR IE is included in the E-DCH TDD Information LCR IE, the E-DCH Physical Layer Category LCR IE shall be ignored.	-	Criticality
E-DCH Processing Overload Level	0		9.2.1.79		-	
E-DCH Power Offset for Scheduling Info	0		9.2.1.85		_	
Extended E-DCH Physical Layer Category LCR	0		9.2.3.67A	The Extended E-DCH Physical Layer Category LCR IE shall be used if the E- DCH Physical Layer Category has a value larger than 5.	YES	reject
Maximum Number of Retransmission for Scheduling Info LCR	0		Maximum Number of Retransmissi ons for E- DCH 9.2.1.81		YES	ignore
E-DCH Retransmission timer for Scheduling Info LCR	0		E-DCH MAC- d Flow Retransmissi on Timer 9.2.3.61a		YES	ignore
E-AGCH Inactivity Monitor Threshold	0		Enumerated (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, spare5,, infinity)	Units of subframes.	YES	ignore

# 9.2.3.50 E-DCH TDD Information Response

The *E-DCH TDD Information Response* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH TDD MAC-d Flow Specific Information Response		0 <maxno ofEDCHM ACdFlows</maxno 		255511-	_	
>E-DCH MAC-d Flow ID	М		9.2.1.74		_	
>Binding ID	0		9.2.1.4		_	
>Transport Layer Address	0		9.2.1.63		_	
E-AGCH Specific Information Response TDD		0 <maxno OfEAGCH codes&gt;</maxno 			-	
>E-AGCH ID TDD	M		9.2.3.51		_	
E-RNTI	M		9.2.1.75		_	
Scheduled E-HICH Specific Information Response 1.28Mcps TDD		0 <maxno OfEHICHc odes&gt;</maxno 		1.28Mcps TDD only	_	
>EI	М		INTEGER (03)	E-HICH indication which is used to indicate UE on which E-HICH the feedback info is carried.	_	
>E-HICH ID TDD	М		9.2.3.51a	If the Extended E-HICH ID TDD IE is included in the E-HICH Information IE, the E-HICH ID TDD IE shall be ignored	-	
>Extended E-HICH ID TDD	0		9.2.3.51b	Applicable to 1.28Mcps TDD only, the Extended E- HICH ID TDD IE shall be used if the E-HICH identity has a value larger than 31.	YES	ignore

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of MAC-d flows
maxnoofEAGCHcodes	Maximum number of E-AGCHs assigned to one UE
maxNoOfEHICHcodes	Maximum number of E-HICHs assigned to one UE

## 9.2.3.51 E-AGCH ID TDD

The *E-AGCH ID* identifies unambiguously an E-AGCH inside a cell for TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH ID			INTEGER (03132255)	

## 9.2.3.51a E-HICH ID TDD

The *E-HICH ID TDD* IE identifies unambiguously an E-HICH inside a cell for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH ID TDD			INTEGER (031)	

### 9.2.3.51b Extended E-HICH ID TDD

The Extended E-HICH ID TDD IE identifies unambiguously an E-HICH inside a cell for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended E-HICH ID TDD			INTEGER (32255)	

# 9.2.3.52 E-DCH TDD Information to Modify

The *E-DCH TDD Information to Modify* IE is used for the modification of an E-DCH.

IE/Group Name	Presen ce	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information	Ce	0 <maxno ofEDCHM ACdFlows</maxno 	Reference	Description	_	Criticality
>E-DCH MAC-d Flow ID	М		9.2.1.74		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.58A		_	
>Maximum Number Of Retransmissions for E-DCH	0		9.2.1.81		_	
>E-DCH HARQ Power Offset TDD	0		9.2.3.61		_	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69		_	
>E-DCH Grant Type	0		9.2.3.53		_	
>E-DCH Logical Channel To Add	0		E-DCH Logical Channel Information 9.2.1.71		_	
>E-DCH Logical Channel To Modify	0		9.2.1.72		_	
>E-DCH Logical Channel To Delete		0 <maxno oflogicalch annels&gt;</maxno 			_	
>>Logical Channel ID	М		9.2.1.80		_	
>E-DCH MAC-d Flow Retransmission Timer	0		9.2.3.61a	LCR TDD only.	_	
MAC-e Reset Indicator	0		9.2.1.83		_	
E-DCH MAC-d PDU Size Format	0		9.2.1.74B		YES	reject

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows
maxnooflogicalchannels	Maximum number of logical channels

# 9.2.3.53 E-DCH Grant Type TDD

The *E-DCH Grant Type* identifies whether a MAC-d flow is scheduled or non-scheduled.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Grant Type			ENUMERATED	
			(Scheduled, Non-	
			scheduled)	

## 9.2.3.54 Timeslot Resource Related Information

The *Timeslot Resource Related Information* is a bitmap indicating which of the timeslots configured for E-DCH are allocated for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related			BIT STRING (13)	
Information				

### 9.2.3.54a Timeslot Resource Related Information LCR

Only for 1.28Mcps TDD. The *Timeslot Resource Related Information LCR* IE is a bitmap indicating which of the timeslots configured for E-DCH are allocated for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information LCR			BIT STRING (5)	

### 9.2.3.55 Power Resource Related Information

The *Power Resource Related Information* specifies the maximum allowed E-PUCH power resource (dB relative to  $P_{e-base}$ ) that the UE may use for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Resource Related Information			INTEGER (132)	The Value indicates 0-31 PRRI index for mapping of Absolute Grant Value in [34].

# 9.2.3.56 E-PUCH Offset

The E-PUCH Offset represents the CFN offset at which a non-scheduled E-DCH grant begins.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-PUCH Offset			INTEGER (0255)	

### 9.2.3.57 E-DCH TDD Maximum Bitrate

The E-DCH TDD Maximum Bitrate parameter indicates the Maximum Bitrate for an E-DCH in TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum Bitrate			INTEGER (09201,)	Bitrate on transport block level. Unit is kbits per second.

### 9.2.3.58 LTGI Presence

The LTGI Presence indicates to the Node B whether it shall use the Long Term Grant Indicator within E-DCH grants issued in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
LTGI Indicator			BOOLEAN	True = LTGI shall be included

### 9.2.3.59 E-HICH Time Offset

The *E-HICH Time Offset* (aka n<sub>E-HICH</sub> [19]) is determined by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Time Offset			INTEGER (444)	

### 9.2.3.59a E-HICH Time Offset LCR

Only for 1.28Mcps TDD. The *E-HICH Time Offset LCR* IE(aka n<sub>E-HICH</sub> [19]) is determined by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Time Offset LCR			INTEGER (415)	

# 9.2.3.60 E-DCH TDD Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the number of E-AGCH.

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Physical Shared Channel Reconfiguration.

When one are more radio links have been configured to use E-DCH (via Radio Link Setup, Radio Link Addition or radio link reconfiguration procedures) the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall credited to the Capacity Credit for the Radio Link Deletion procedure that removes the last radio link configured for E-DCH.

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs and the UL costs shall be applied to the DL or Global Capacity Credit.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UL Cost	М		INTEGER (065535)	Cost per timeslot of the E- DCH. If not present, zero cost
				shall be applied.
DL Cost	0		INTEGER (065535)	Cost per E-AGCH or E-HICH configured. If not present, zero cost shall be applied.

#### 9.2.3.61 E-DCH HARQ Power Offset TDD

The *E-DCH HARQ Power Offset TDD* is the power offset measured in dB.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH HARQ Power Offset TDD			INTEGER (06)	

### 9.2.3.61a E-DCH MAC-d Flow Retransmission Timer

Only for 1.28Mcps TDD. The *E-DCH MAC-d Flow Retransmission Timer* IE is used in the E-DCH retransmission control as defined in [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow			ENUMERATED (10,	Unit: ms
			` '	
Retransmission Timer			15, 20, 25, 30, 35,	Node B may use this value to
			40, 45, 50, 55, 60,	stop the re-transmission of the
			65, 70, 75, 80, 85,	corresponding MAC-e PDU.
			90, 95, 100, 110,	
			120, 140, 160, 200,	
			240, 280, 320, 400,	
			480, 560,)	

# 9.2.3.62 SNPL Reporting Type

The *SNPL Reporting Type* indicates to the Node B whether the UEs in a cell shall use the type 1 or type 2 Serving and Neighbour Cell Pathloss metric [21].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SNPL Reporting Type			ENUMERATED (type1, type2)	

### 9.2.3.63 Maximum Generated Received Total Wide Band Power in Other Cells

The Maximum Generated Received Total Wide Band Power in Other Cells indicates the maximum aggregate UL interference that may be generated from scheduled transmissions into other (non-serving) cells.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Maximum Generated Received Total Wide Band Power in Other Cells			INTEGER (0621)	The Value mapping is according to mapping for measurement type "Received Total Wide Band Power" in [23].

## 9.2.3.64 E-DCH Non-scheduled Grant Information 7.68Mcps TDD

The *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE is used to specify the details of a non-scheduled grant for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information	M		9.2.3.54	
Power Resource Related Information	М		9.2.3.55	
Repetition Period	M		9.2.3.16	
Repetition Length	M		9.2.3.15	
TDD E-PUCH Offset	M		9.2.3.56	
TDD Channelisation Code 7.68Mcps	M		9.2.3.34	

## 9.2.3.65 E-DCH TDD Information 7.68Mcps

The *E-DCH TDD Information 7.68Mcps* specifies the details of the maximum bit rate and processing overload level for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum Bitrate 7.68Mcps	0		9.2.3.66	
E-DCH Processing Overload Level	0		9.2.1.79	
E-DCH Power Offset for Scheduling Info	0		9.2.1.85	

## 9.2.3.66 E-DCH TDD Maximum Bitrate 7.68Mcps

The *E-DCH TDD Maximum Bitrate 7.68Mcps* parameter indicates the Maximum Bitrate for an E-DCH in 7.68Mcps TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum Bitrate 7.68Mcps			INTEGER (017713,)	Bitrate on transport block level. Unit is kbits per second.

# 9.2.3.67 E-DCH Physical Layer Category LCR

Only for 1.28Mcps TDD. The *E-DCH Physical Layer Category LCR* IE parameter indicates the E-DCH physical layer capability of UE in LCR TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Physical Layer			INTEGER(15)	As defined in [33]
Category LCR				

## 9.2.3.67A Extended E-DCH Physical Layer Category LCR

Only for 1.28Mcps TDD. The *Extended E-DCH Physical Layer Category LCR* IE parameter indicates the E-DCH physical layer capability of UE in LCR TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended E-DCH Physical Layer Category LCR			INTEGER(6,)	As defined in [33]

## 9.2.3.68 E-HICH Type

The *E-HICH Type* IE identifies whether a E-HICH is scheduled or non-scheduled inside a cell for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Type			ENUMERATED (	
			Scheduled, Non-	
			scheduled)	

## 9.2.3.69 Maximum Target Received Total Wide Band Power LCR

The *Maximum Target Received Total Wide Band Power LCR* indicates the maximum target UL interference for a certain cell under CRNC, including received wide band power from all sources.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Maximum Target Received Total Wide Band Power LCR			INTEGER (0621)	The Value mapping is according to mapping for measurement type "Received Total Wide Band Power" in
				[23].

### 9.2.3.70 MBSFN Only Mode Indicator

The MBSFN only mode indicator indicates from CRNC to the Node B whether the cell is setup for MBSFN only mode for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBSFN Only Mode Indicator			ENUMERATED ( MBSFN Only Mode)	

## 9.2.3.71 MBSFN Only Mode Capability

This parameter defines the MBSFN only mode capability for a local cell for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
MBSFN Only Mode Capability			ENUMERATED (	
			MBSFN Only Mode	
			capable, MBSFN	
			Only Mode non	
			capable)	

### 9.2.3.72 HS-DSCH Common System Information LCR

The *HS-DSCH Common System Information LCR* IE provides information for HS-DSCH configured for UE in Cell\_FACH, Cell\_PCH and URA\_PCH and Information related to BCCH modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Common Information LCR		01		
>CCCH Priority Queue ID	M		Priority Queue ID Applicable for all carriers using multiple frequencies	
>SRB#1 Priority Queue ID	M		Priority Queue ID 9.2.1.49C	Applicable for all carriers when using multiple frequencies.
>Associated Common MAC Flow LCR	М		Common MAC Flow ID LCR 9.2.3.76	The Common MAC Flow ID LCR shall be one of the flow IDs defined in the Common MAC Flow Specific Information of this IE or shall only refer to a Common MAC flow already existing in the old configuration.
>FACH Measurement Occasion Cycle Length Coefficient	0		9.2.1.111	
>BCCH Specific HS-DSCH RNTI Information LCR	0		9.2.3.89	
Common MAC Flow Specific Information LCR		0 <maxno ofCommon MACFlows LCR&gt;</maxno 		
>Common MAC Flow ID LCR	М		9.2.3.76	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.
>Common MAC Flow Priority Queue Information LCR		0 <maxno ofCommon MACQueu es&gt;</maxno 		
>>Priority Queue Information for Enhanced FACH	M		Priority Queue Information for Enhanced FACH/PCH 9.2.1.117	
>Transport Bearer Request Indicator	0		9.2.1.62A  Shouldn"t be contained MAC flow is setup in procedure. Should be contained if the MAC flow is modified in procedure.	
>UARFCN	0		9.2.1.65 Corresponds to Nt [15] Applicable for 1.28Mcps 7 when using multiple frequencies.	
Common H-RNTI Information		0 <maxco mmonHR NTI&gt;</maxco 		
>Common H-RNTI	М		HS-DSCH-RNTI 9.2.1.31J	
Sync Information		01		
>T-sync	М		ENUMERATED (40, 80, 120, 160, 200, 300, 400, 500,)	Units of MS.
>T-protect	М		ENUMERATED (40, 60, 80, 100, 120, 200, 400,) Units of MS.	
>N-protect	M		INTEGER (07)	

TDD ACK NACK Power Offset	0	9.2.3.18F 9.2.1.67A	
HS-SICH SIR Target	0	UL SIR 9.2.1.67A	
HS-SICH TPC step size	0	9.2.3.21a	

Range bound	Explanation
maxnoofCommonMACFlowsLCR	Maximum number of Common MAC Flows for 1.28Mcps TDD
maxnoofCommonMACQueuesLCR	Maximum number of Priority Queues for Common MAC Flow for
	1.28Mcps TDD
maxCommonHRNTI	Maximum number of Common H-RNTI

# 9.2.3.73 HS-DSCH Paging System Information LCR

The *HS-DSCH Paging System Information LCR* IE provides information for HS-DSCH configured for UE in Cell\_PCH and URA\_PCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flow Specific Information LCR		0 <maxno ofPagingM ACFlow&gt;</maxno 		
>Paging MAC Flow ID	M		9.2.1.113	
>HSDPA Associated PICH Information LCR	0		9.2.3.77	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.
>ToAWS	0		9.2.1.61	
>ToAWE	0		9.2.1.60	
>Paging MAC Flow Priority Queue Information LCR		0 <maxno ofPagingM ACQueues &gt;</maxno 		
>>Priority Queue Information for Enhanced PCH	M		Priority Queue Information for Enhanced FACH/PCH 9.2.1.117	
>Transport Bearer Request Indicator	0		9.2.1.62A	Shouldn"t be contained if the MAC flow is setup in procedure. Should be contained if the MAC flow is modified in procedure
HS-SCCH Power	0		DL Power 9.2.1.21	
HS-PDSCH Power	0		DL Power 9.2.1.21	
DTCH/DCCH Reception window size	0		INTEGER (116)	Number of subframes for UE to detect the HS-SCCH
N <sub>PCH</sub>	0		INTEGER (18)	
Paging Sub-Channel Size	0		INTEGER (13)	number of frames for a Paging sub-channel
Transport Block Size List		0 <maxno ofHS- DSCHTBS sE-PCH&gt;</maxno 		
>Transport Block Size Index for Enhanced PCH	М		INTEGER (132)	Index of the value range 1 to 32 of the MAC-ehs transport block size as specified in [32]

Range bound	Explanation			
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows			
maxnoofPagingMACQueues	Maximum number of Priority Queues for Paging MAC Flow			
maxnoofHS-DSCHTBSsE-PCH	Maximum number of HS-DSCH Transport Block Sizes used for			
	Enhanced PCH operation associated HS-SCCH less			

### 9.2.3.74 HS-DSCH Common System Information Response LCR

The *HS-DSCH Common System Information Response LCR* IE provides information for HS-DSCH configured for UE not in Cell\_DCH that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned criticality
HS-SCCH Specific Information Response LCR		0 <maxno OfHSSCC HsLCR&gt;</maxno 			-	
>HS SCCH ID LCR	M		9.2.3.88		-	
HARQ Memory Partitioning	0		9.2.1.102		-	
Common MAC Flow Specific Information Response LCR		0 <maxno ofCommon MACFlows LCR&gt;</maxno 			-	
>Common MAC Flow ID LCR	M		9.2.3.76		-	
>Binding ID	0		9.2.1.4		-	
>Transport Layer Address	0		9.2.1.63		-	
>HS-DSCH Initial Capacity Allocation	0		9.2.1.31Ha		-	
UARFCN	0		9.2.1.65	Applicable to 1.28Mcps TDD when using multiple frequencies. This is the UARFCN for the first Frequency repetition of HARQ Memory Partitioning.	YES	reject
HARQ Memory Partitioning Per UARFCN		0< maxFrequ encyinCell -1 >		Corresponds to Nt [15] Applicable for 1.28Mcps TDD when using multiple frequencies.	GLOBAL	reject
>HARQ Memory Partitioning	M		9.2.1.102		-	
>UARFCN	M		9.2.1.65		-	

Range Bound	Explanation
maxnoofCommonMACFlowsLCR	Maximum number of Common MAC Flows for 1.28Mcps TDD
maxNoOfHSSCCHsLCR	Maximum number of HS-SCCH codes for 1.28Mcps TDD
maxFrequencyinCell-1	Maximum number of frequencies that can be used in a cell minus 1

## 9.2.3.75 HS-DSCH Paging System Information Response LCR

The *HS-DSCH Paging System Information Response LCR* IE provides information for HS-DSCH configured for UE in Cell\_PCH and URA\_PCH that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flow Specific Information Response LCR		0 <maxno ofPagingM ACFlow&gt;</maxno 		
>Paging MAC Flow ID	M		9.2.1.113	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
>HS-PDSCH DL Timeslot and Code Information LCR		0 <maxno ofDLtsLCR &gt;</maxno 		
>>Time Slot LCR	M		9.2.3.24A	
>>Midamble Shift LCR	М		9.2.3.7A	
>>Codes LCR		1 <maxno ofHSPDS CHs&gt;</maxno 		

>>>TDD Channelisation	M	9.2.3.19	
Code			

Range bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows
maxnoofDLtsLCR	Maximum number of Downlink time slots in a cell for 1.28Mcps TDD
maxnoofHSPDSCHs	Maximum number of HS-PDSCHs in one time slot of a Cell for 1.28Mcps
	TDD

### 9.2.3.76 Common MAC Flow ID LCR

The Common MAC Flow ID LCR IE is the unique identifier for one Common MAC flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common MAC Flow ID LCR			INTEGER (0255)	

### 9.2.3.77 HSDPA Associated PICH Information LCR

The HSDPA Associated PICH Information LCR IE provides information for PICH used for Enhanced PCH operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE HSDPA PICH				
>Shared with PCH				
>>Common Physical	M		9.2.1.13	
Channel ID				
>Not shared with PCH LCR				
>>Common Physical	M		9.2.1.13	
Channel ID				
>> TDD Channelisation	M		9.2.3.19a	
Code LCR				
>> Time Slot LCR	M		9.2.3.24A	
>>Midamble Shift LCR	M		9.2.3.7A	
Offset				
>>TDD Physical Channel	M		9.2.3.20	
offset				
>>Repetition Period	М		9.2.3.16	
>>Repetition Length	M		9.2.3.15	
>>Paging Indicator Length	М		9.2.3.8	
>>PICH Power	М		9.2.1.49A	
>> Second TDD Code LCR	М		TDD Channelisation	
Code LCR			Code LCR 9.2.3.19a	
>>TSTD Indicator	0		9.2.1.64	

#### 9.2.3.78 Common MAC Flows To Delete LCR

The Common MAC Flows To Delete LCR IE is used for the removal of Common MAC flows from a Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common MAC Flows To Delete LCR		1 <maxno ofCommon MACFlows LCR&gt;</maxno 		
>Common MAC Flow ID LCR	М		9.2.3.76	

Range Bound	Explanation
maxnoofCommonMACFlowsLCR	Maximum number of Common MAC Flows for 1.28Mcps TDD

# 9.2.3.79 Common E-DCH System Information LCR

The *Common E-DCH System Information LCR* IE provides information for E-DCH configured for UE in Cell\_FACH and Idle state.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Common MAC Flow Specific Information LCR		0 <maxn oofComm onMACFI owsLCR &gt;</maxn 			-	
>UL Common MAC Flow ID	M		Common MAC Flow ID LCR 9.2.3.76		-	
>Transport Bearer Request Indicator	0		9.2.1.62A		-	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	-	
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	-	
>Payload CRC Presence Indicator	0		9.2.1.49		-	
>Common E-DCH MAC- d Flow Specific Information LCR	0		9.2.3.81		-	
>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable for 1.28Mcps TDD when using multiple frequencies.	-	
Common E-PUCH Information LCR	0		9.2.3.83		-	
E-TFCS Information TDD	0		9.2.3.46		-	
Maximum Number of Retransmission for Scheduling Info LCR	0		Maximum Number of Retransmissions for E-DCH 9.2.1.81		-	
E-DCH Retransmission timer for Scheduling Info LCR	0		E-DCH MAC-d Flow Retransmission Timer 9.2.3.61a		-	
UL Synchronisation Parameters LCR		01			YES	reject
>Uplink Synchronisation Step Size	М		9.2.3.26H		_	
>Uplink Synchronisation Frequency	М		9.2.3.26G		_	
Physical Channel ID for Common E-RNTI Requested Indicator	0		Enumerated(reque sted)		YES	ignore

Range bound	Explanation
maxnoofCommonMACFlowsLCR	Maximum number of Common MAC Flows

# 9.2.3.80 Common E-DCH System Information Response LCR

The *Common E-DCH System Information Response LCR* IE provides information for E-DCH configured for UE in Cell\_FACH and Idle state that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Common MAC Flow Specific Information Response LCR		0 <maxno ofEDCHM ACFlowsL CR&gt;</maxno 		Note1
>UL Common MAC Flow ID	M		Common MAC Flow ID LCR 9.2.3.76	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
E-AGCH Specific Information Response TDD		0 <maxno ofEAGCHs LCR&gt;</maxno 		
>E-AGCH ID TDD	M		9.2.3.51	
E-HICH Specific Information Response 1.28Mcps TDD		0 <maxno OfEHICHs LCR&gt;</maxno 		1.28Mcps TDD only
>EI	M		INTEGER (03)	E-HICH indication which is used to indicate UE on which E-HICH the feedback info is carried.
>E-HICH ID TDD LCR	M		9.2.3.51a	
CCCH E-RNTI Information LCR	0		9.2.3.84	

Note1: the information element is a simplified representation of the ASN.1. Repetitions 1 to maxnoofEDCHMACFlows and Repetition maxnoofEDCHMACFlows+1 to maxnoofEDCHMACFlowsLCR are represented by separate ASN.1 structures with different criticality.

Range bound	Explanation
maxnoofCommonMACFlowsLCR	Maximum number of Common MAC Flows
maxNoofEAGCHsLCR	Maximum number of E-AGCHs in a Cell
maxNoOfEHICHsLCR	Maximum number of E-HICHs in a Cell

### 9.2.3.81 Common E-DCH MAC-d Flow Specific Information LCR

The *Common E-DCH MAC-d Flow Specific Information LCR* IE is used for the establishment or modity Common E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assinged Criticality
Common E-DCH MAC-d Flow Specific Information LCR		1 <maxno ofEDCHM ACdFlows LCR&gt;</maxno 				
>Common E-DCH MAC-d Flow ID	М		9.2.3.87			
>Maximum Number Of Retransmissions For E-DCH	0		9.2.1.81			
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69			
>Common E-DCH Logical Channel information	0	1 <maxno oflogicalch annels&gt;</maxno 				
>>Logical Channel ID	M		9.2.1.80			
>>Maximum MAC-c PDU Size Extended	0		MAC PDU Size Extended 9.2.1.38C			

>>Scheduling Priority	0	9.2.1.53H	-	ignore
Indicator				
>E-DCH HARQ Power Offset TDD	0	9.2.3.61		
>E-DCH MAC-d Flow Retransmission Timer	0	9.2.3.61a		

Range bound	Explanation
maxnoofEDCHMACdFlowsLCR	Maximum number of E-DCH MAC-d Flows for 1.28Mcps TDD
maxnooflogicalchannels	Maximum number of logical channels

### 9.2.3.82 Enhanced UE DRX Information LCR

The *Enhanced UE DRX Information LCR* IE provides information for configuring the UE in Cell\_FACH state to discontinuously reception for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T321	M		ENUMERATED (100, 200, 400, 800,)	Determines the time the UE waits until initiating DRX operation, in ms.
HS-DSCH DRX cycle <sub>FACH</sub>	М		ENUMERATED (4, 8, 16, 32,)	Determines the length of the DRX Cycle during DRX operation, in frames
HS-DSCH Rx burst <sub>FACH</sub>	М		ENUMERATED (1, 2, 4, 8, 16,)	Determines the period within the DRX Cycle that the UE continuously receives HS-DSCH, in frames

### 9.2.3.83 Common E-PUCH Information LCR

The *Common E-PUCH Information LCR* IE provides parameters to configure the E-PUCH physical channel for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum code rate	M		INTEGER (063)	Unit: - Range: 0.0551 Step: 0.015
Maximum code rate	М		INTEGER (063)	Unit: - Range: 0.0551 Step: 0.015
HARQ Info for E-DCH	M		ENUMERATED (rv0, rvtable)	'rv0' indicates that the UE will only use E_DCH RV index 0. 'rvtable' indicates that the UE will use an RSN based RV index as specified in [8]
PRXdes_base per UARFCN		0 <maxfre quencyinC ell&gt;</maxfre 		
>PRXdes_base	M		INTEGER (-11250)	dBm. Reference Desired RX power level for E-PUCH. Reference to Pe-base in [21]
>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable for 1.28Mcps TDD when using multiple frequencies.
E-PUCH TPC Step Size	0		TDD TPC UL Step Size 9.2.3.21a	
E-AGCH TPC Step Size	0		TDD TPC DL Step Size 9.2.3.21	
E-PUCH Power Control GAP	0		INTEGER (1255)	Unit: Number of subframes. Reference to E-PUCH Power Control for 1.28Mcps TDD in [21]. If it is not present, UE shall deem it to be infinite in which case closed loop power control shall always be used.

Range bound	Explanation		
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell		

### 9.2.3.84 Common E-RNTI Information LCR

The *Common E-RNTI Information LCR* IE provides parameters to configure the common E-RNTI used in enhanced CELL\_FACH and Idle mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Common E-RNTI Information LCR		1 <maxnoofe RUCCHsLCR &gt;</maxnoofe 			-	
>Starting E-RNTI	М		9.2.1.75		-	
>Number of group	M		INTEGER (132)		-	
>Number of E-RNTI per group	M		INTEGER (17)		-	
>Associated Phsical Channel ID	0		Common Physical Channel ID 9.2.1.13		YES	reject

Range bound	Explanation		
maxnoofERUCCHsLCR	Maximum number of E-RUCCH that can be defined in a Cell		

### 9.2.3.85 Paging MAC Flows To Delete LCR

The Paging MAC Flows To Delete LCR IE is used for the removal of Paging MAC flows from a Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flows To Delete LCR		1 <maxno ofPagingM ACFlow&gt;</maxno 		
>Paging MAC Flow ID	М		9.2.1.113	

Range Bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows

#### 9.2.3.86 Common E-DCH MAC-d Flows To Delete LCR

The Common E-DCH MAC-d Flows To Delete LCR IE is used for the removal of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flows To Delete		1 <maxno ofCommon EDCHMA CdFlowsL CR&gt;</maxno 		
>Common E-DCH MAC-d Flow ID LCR	M		9.2.3.87	

Range Bound	Explanation
maxnoofCommonEDCHMACdFlowsLCR	Maximum number of common E-DCH MAC-d flows

#### 9.2.3.87 Common E-DCH MAC-d Flow ID LCR

The Common E-DCH MAC-d Flow ID LCR IE is the unique identifier for one MAC-d flow on E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flow			INTEGER	
ID LCR			(0255)	

#### 9.2.3.88 HS-SCCH ID LCR

The HS-SCCH ID identifies unambiguously a HS-SCCH and its paired HS-SICH within the set of HS-SCCHs for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
HS SCCH ID LCR			INTEGER (0255)	

### 9.2.3.89 BCCH Specific HS-DSCH RNTI Information LCR

The *BCCH Specific HS-DSCH RNTI Information* IE provides information for BCCH Transmission using HS-DSCH for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
BCCH Specific HS-DSCH	M		HS-DSCH-RNTI	
RNTI			9.2.1.31J	
HS-SCCH Power	M		DL Power	
			9.2.1.21	
HS-PDSCH Power	M		DL Power	
			9.2.1.21	

### 9.2.3.90 MAC-es Maximum Bit Rate LCR

The MAC-es Maximum Bit Rate LCR IE indicates the maximum number of bits per second to be delivered over the air interface.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-es Maximum Bit Rate			INTEGER	Unit: bit/s
LCR			(0256,000,000	
			,)	

### 9.2.3.91 Semi-Persistent scheduling Capability LCR

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Semi-Persistent scheduling			ENUMERATED	
Capability LCR			(Semi-Persistent	
			scheduling Capable,	
			Semi-Persistent	
			scheduling Non-	
			Capable)	

## 9.2.3.92 Continuous Packet Connectivity DRX Capability LCR

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Continuous Packet			ENUMERATED	
Connectivity DRX Capability			(Continuous Packet	
LCR			Connectivity DRX	
			Capable, Continuous	
			Packet Connectivity	
			DRX Non-Capable)	

## 9.2.3.93 Continuous Packet Connectivity DRX Information LCR

The *Continuous Packet Connectivity DRX Information LCR* IE defines the parameters used for Continuous Packet Connectivity DRX operation for 1.28 Mcps TDD (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Enabling Delay	М		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames	-	
HS-SCCH DRX Information		1			-	
>UE DRX Cycle	M		ENUMERATED( 1,2,4,8,16,32,64, )	Units of subframes	-	
>Inactivity Threshold for UE DRX Cycle	0		ENUMERATED( 1,2,4,8,16,32,64, )	Units of subframes	-	
>UE DRX Offset	M		INTEGER (063)	Units of subframes. Offset of the UE DRX cycles at the given	-	
>Inactivity Threshold for UE DRX Cycle Ext	0		ENUMERATED( 128,256,512,)	Units of subframes.	YES	ignore
E-AGCH DRX Information		01			-	
CHOICE E-AGCH DRX information type	М				-	
>Same as HS- SCCH			NULL	Indicate the E-AGCH DRX Cycle and Offset are the same as the HS-SCCH DRX Cycle and Offset, and the E-AGCH Inactivity Monitor Threshold is absent	-	
>E-AGCH DRX parameters					-	
>>E-AGCH DRX cycle	M		Enumerated (1,2,4,8,16,32,64 )	Units of subframes.	-	
>>E-AGCH Inactivity Monitor Threshold	0		Enumerated (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, infinity,)	Units of subframes.	-	
>>E-AGCH DRX Offset	М		Integer (0 63)	Units of subframes. Offset of the E-AGCH DRX cycles.	-	
Enabling Delay Ext	0		Enumerated (infinity,)		Yes	ignore

## 9.2.3.94 Continuous Packet Connectivity DRX Information To Modify LCR

The Continuous Packet Connectivity DRX Information To Modify LCR IE is used for modification of Continuous Packet Connectivity DRX information in a Node B Communication Context. The Continuous Packet Connectivity DRX Information To Modify LCR IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Enabling Delay	0		ENUMERATE D (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames	-	
CHOICE DRX Information To Modify	0				-	
>Modify					-	
>>HS-SCCH DRX		01			-	
Information						
>>>UE DRX Cycle	М		ENUMERATE D(1,2,4,8,16,3 2,64,)	Units of subframes	-	
>>>Inactivity Threshold for UE DRX Cycle	0		ENUMERATE D(1,2,4,8,16,3 2,64,)	Units of subframes	-	
>>>UE DRX Offset	M		INTEGER (063)	Units of subframes. Offset of the UE DRX cycles at the given TTI	-	
>>>Inactivity Threshold for UE DRX Cycle Ext	0		ENUMERATE D(128,256,512 ,)	Units of subframes	YES	ignore
>>E-AGCH DRX		01			-	
Information						
>>>CHOICE E- AGCH DRX information type	M				-	
>>>Same as HS-SCCH			NULL	Indicate the E-AGCH DRX Cycle and Offset are the same as the HS-SCCH DRX Cycle and Offset, and the E-AGCH Inactivity Monitor Threshold is absent	-	
>>>E-AGCH					-	
DRX parameters >>>>E-AGCH DRX cycle	М		Enumerated (1,2,4,8,16,32, 64)	Units of subframes.	-	
>>>>E-AGCH Inactivity Monitor Threshold	0		Enumerated (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, infinity,)	Units of subframes.	-	
>>>>E-AGCH DRX Offset	М		Integer (0 63)	Units of subframes. Offset of the E- AGCH DRX cycles.	-	
>Deactivate			NULL		-	
Enabling Delay Ext	0		Enumerated (infinity,)		Yes	ignore

## 9.2.3.95 Continuous Packet Connectivity DRX Information Response LCR

Node B uses the *Continuous Packet Connectivity DRX Information Response LCR* IE to inform the CRNC the parameters used for Continuous Packet Connectivity DRX operation for 1.28 Mcps TDD (see ref. [21]). Continuous

Packet Connectivity DRX related parameters shall be configured by the CRNC. For the parameters which can be accepted by Node B, the Node B shall not included the related IEs in the *Continuous Packet Connectivity DRX Information Response LCR* IE. For the parameters which can be not accepted by Node B, the Node B shall included the related IEs in the *Continuous Packet Connectivity DRX Information Response LCR* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Enabling Delay	0		ENUMERATE D (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames	-	
HS-SCCH DRX Information		01			-	
>UE DRX Cycle	0		ENUMERATE D(1,2,4,8,16,3 2,64,)	Units of subframes	-	
>Inactivity Threshold for UE DRX Cycle	0		ENUMERATE D(1,2,4,8,16,3 2,64,)	Units of subframes	-	
>UE DRX Offset	0		INTEGER (063)	Units of subframes. Offset of the UE DRX cycles at the given TTI	-	
>Inactivity Threshold for UE DRX Cycle Ext	0		ENUMERATE D(128,256,512 ,)	Units of subframes	YES	ignore
E-AGCH DRX Information		01	, ,		-	
CHOICE E-AGCH DRX information type	М				-	
>Same as HS-SCCH			NULL	Indicate the E-AGCH DRX Cycle and Offset are the same as the HS-SCCH DRX Cycle and Offset, and the E-AGCH Inactivity Monitor Threshold is absent	-	
>E-AGCH DRX parameters					-	
>>E-AGCH DRX cycle	0		Enumerated (1,2,4,8,16,32, 64,)	Units of subframes.	-	
>>E-AGCH Inactivity Monitor Threshold	0		Enumerated (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, infinity,)	Units of subframes.	-	
>>E-AGCH DRX Offset	0		Integer (0 63)	Units of subframes. Offset of the E- AGCH DRX cycles.	-	
Enabling Delay Ext			Enumerated (infinity,)	This IE can only be used when the Enabling Delay Ext is included in the request message, otherwise, the IE shall not be used	Yes	ignore

## 9.2.3.96 HS-DSCH Semi-Persistent scheduling Information LCR

The *HS-DSCH Semi-Persistent scheduling Information LCR* IE defines the parameters used for HS-DSCH semi-Persistent scheduling for 1.28 Mcps TDD (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		1< maxnoofT BSsMappi ng >		
>Transport Block Size maping Index	M		INTEGER (0 maxnoofTBSsMappi ng-1)	Corresponds to the <i>Transport-block size information</i> field carried on HS-SCCH (see ref [34]).
>Transport Block Size Index	M		INTEGER (1 maxnoofHS- DSCHTBSsLCR)	Corresponds to the <i>TB index</i> in the related Transport Block Size table (see ref [32]).
Repetition Period list		1 <maxno ofRepetit ionPeriod LCR&gt;</maxno 		
>Repetition Period Index	М		INTEGER (0 maxnoofRepetitionP eriodLCR-1)	Corresponds to the Resource repetition period index field carried on HS-SCCH (see ref [34]).
>Repetition Period	M		ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	Units of subframes
>Repetition Length	0		INTEGER (163)	Absence means Repetition Length equal to 1.
HS-DSCH Semi-Persistent Resource Reservation Indicator	0		ENUMERATED(Res erve)	Reserve means the HS-DSCH Semi-Persistent Resource is required to be reserved and be informed via response message.
HS-DSCH Semi-Persistent scheduling operation Indicator		1		
>CHOICE configuration				
>>Logical Channel level			BIT STRING (16)	Available when MAC-ehs is configured. Indicates the logical channels for which the HS-DSCH Semi-Persistent operation is intended to be uses .
>> Priority Queue level			BIT STRING (8)	Indicates the Priority Queues for which the HS-DSCH Semi-Persistent operation is intended to be used.

Range Bound	Explanation
maxnoofHS-DSCHTBSsLCR	Maximum number of HS-DSCH Transport Block Sizes
maxnoofRepetitionPeriodLCR	Maximum number of Repetition Period for 1.28Mcps TDD
maxnoofTBSsMapping	Maximum number of Transport Block Size mapping index on HS-SCCH.

## 9.2.3.96a HS-DSCH Semi-Persistent scheduling Information to modify LCR

The *HS-PSCH Semi-Persistent scheduling Information to modify LCR* IE is used for the modification of HS-DSCH Semi-Persistent scheduling information for 1.28 Mcps TDD (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Transport Block Size List		0<			-	

		maxnoofT				
		BSsMappi				
		ng >				
> Transport Block Size	M		INTEGER (0	Corresponds	-	
maping Index			maxnoofTBSsMappi	to the		
			ng-1)	Transport-		
				block size		
				information		
				field carried on		
				HS-SCCH		
				(see ref [34]).		
>Transport Block Size Index	М		INTEGER (1	Corresponds	-	
			maxnoofHS-	to the TB		
			DSCHTBSsLCR)	index in the		
			,	related		
				Transport		
				Block Size		
				table (see ref		
				[32]).		
Repetition Period list		0 <maxno< td=""><td></td><td>[-]/-</td><td>-</td><td></td></maxno<>		[-]/-	-	
		ofRepetitio				
		nPeriodLC				
		R>				
>Repetition Period Index	М	1	INTEGER (0	Corresponds	-	
Topolition Follow Mack			maxnoofRepetitionP	to the		
			eriodLCR)	Resource		
			01.002011)	repetition		
				period index		
				field carried on		
				HS-SCCH		
				(see ref [34]).		
>Repetition Period	М		ENUMERATED	Units of	-	
Triopolillori Criod			(1, 2, 4, 8, 16, 32,	subframes		
			64,)	Cabitatiloo		
>Repetition Length	0		INTEGER	Absence	-	
3.			(163)	means		
			(1112)	Repetition		
				Length equal		
				to 1.		
HS-DSCH Semi-Persistent	0		ENUMERATED(Res	Reserve	YES	ignore
Resource Reservation			erve)	means the		9
Indicator				Semi-		
a.oa.o				Persistent HS-		
				DSCH		
				Resource is		
				required to be		
				reserved and		
				be informed		
				via response		
				message.		
HS-DSCH Semi-Persistent	1	01			YES	reject
scheduling operation Indicator	1	1			3	-,,-
>CHOICE configuration						
>>Logical Channel level			BIT STRING (16)	Available		
				when MAC-		
				ehs is		
		1		configured.		
				Indicates the		
				logical		
				channels for		
		1		which the HS-		
				DSCH Semi-		
				Persistent		
				operation is		
				intended to be		
				used.		
>> Priority Queue level			BIT STRING (8)	Indicates the		
1 ,,			- (-)	Priority		

Queues for	
which the HS-	
DSCH Semi-	
Persistent	
operation is	
intended to be	
used.	

Range Bound	Explanation
maxnoofHS-DSCHTBSsLCR	Maximum number of HS-DSCH Transport Block Sizes
maxnoofRepetitionPeriodLCR	Maximum number of Repetition Period for 1.28Mcps TDD
maxnoofTBSsMapping	Maximum number of Transport Block Size mapping index on HS-
	SCCH.

## 9.2.3.97 E-DCH Semi-Persistent scheduling Information LCR

The *E-DCH Semi-Persistent scheduling Information LCR* IE defines the parameters used for E-DCH semi-Persistent scheduling for 1.28 Mcps TDD (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Repetition Period list		1 <maxno ofRepetitio nPeriodL CR&gt;</maxno 			-	,
>Repetition Period Index	М		INTEGER (0 maxnoofRepetition PeriodLCR-1)		-	
>Repetition Period	М		ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	Units of subframes	-	
>Repetition Length	0		INTEGER (163)	Absence means Repetition Length equal to 1.	-	
E-DCH Semi-Persistent scheduling Indicator	М		BIT STRING (16)	Indicates the logical channels for which the E-DCH Semi-Persistent operation is intended to be used.	-	
Semi-Persistent E-DCH releted E-HICH Information		1			-	
>E-HICH ID TDD	M		9.2.3.51a	If the Extended E-HICH ID TDD IE is included in the E-HICH Information IE, the E-HICH ID TDD IE shall be ignored.	-	
>Signature Sequence Group Index	M		INTEGER (019)		-	
>Extended E-HICH ID TDD	0		9.2.3.51b	The Extended E-HICH ID TDD IE shall be used if the E-HICH identity has a value larger than 31.	-	
E-DCH Semi-Persistent	0		ENUMERATED(Re	Reserve means	YES	ignore

Resource Reservation	serve)	the E-DCH	
Indicator		Semi-Persistent	
		Resource is	
		required to be	
		reserved and	
		be informed via	
		response	
		message.	

Range Bound	Explanation
maxnoofRepetitionPeriodLCR	Maximum number of Repetition Period for 1.28Mcps TDD

## 9.2.3.97a E-DCH Semi-Persistent scheduling Information to modify LCR

The *E-DCH Semi-Persistent scheduling Information to modify LCR* IE is used for the modification of E-DCH Semi-Persistent scheduling information for 1.28 Mcps TDD (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Repetition Period list		0 <maxno ofRepetitio nPeriodL CR&gt;</maxno 			-	,
>Repetition Period Index	М		INTEGER (0 maxnoofRepetiti onPeriodLCR-1)		-	
>Repetition Period	М		ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	Units of subframes	-	
>Repetition Length	0		INTEGER (163)	Absence means Repetition Length equal to 1.	-	
E-DCH Semi-Persistent scheduling Indicator	0		BIT STRING (16)	Indicates the logical channels for which the E-DCH Semi-Persistent operation is intended to be used.	-	
Semi-Persistent E-DCH releted E-HICH Information		01			-	
>E-HICH ID TDD	M		9.2.3.51a	If the Extended E-HICH ID TDD IE is included in the E-HICH Information IE, the E-HICH ID TDD IE shall be ignored.	-	
>Signature Sequence Group Index	M		INTEGER (019)		-	
>Extended E-HICH ID TDD	0		9.2.3.51b	The Extended E-HICH ID TDD IE shall be used if the E-HICH identity has a value larger than 31.	-	
E-DCH Semi-Persistent Resource Reservation Indicator	0		ENUMERATED( Reserve)	Reserve means the E-DCH Semi-Persistent Resource is	YES	ignore

required to be reserved and be informed via	
response	
message.	

Range Bound	Explanation
maxnoofRepetitionPeriodLCR	Maximum number of Repetition Period for 1.28Mcps TDD

## 9.2.3.98 HS-DSCH Semi-Persistent scheduling Information Response LCR

The *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE provides information for HS-DSCH Semi-Persistent scheduling determined within the Node B (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SICH information for HS-DSCH Semi- Persistent Scheduling operation		1< maxnoof HS- SICHforS PS>			1	
>HS-SICH mapping index	M		INTEGER (0 maxnoofHS-SICHforSPS-1)		-	
>CHIOCE HS-SICH type					-	
>>HS-SCCH associated HS-SICH						
>>>HS-SICH ID	М		9.2.3.5Gb	If the Extended HS-SICH ID IE is included in the HS-SICH Information LCR IE, the HS-SICH ID IE shall be ignored.	-	
>>>Extended HS- SICH ID	0		9.2.3.5K	The Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	-	
>>Non-HS-SCCH associated HS-SICH					-	
>>Non-HS-SCCH associated HS-SICH ID	М		INTEGER (0255)		-	
Allcoated HS-PDSCH Semi-persistent resource		01			-	
> Repetition Period Index	M		INTEGER (0 maxnoofRepet itionPeriodLC R-1)		-	
>Repetition Length for HS-PDSCH Semi-persistent Resouce	0		INTEGER (163)	The IE is not used.	-	
>HS-PDSCH offset	М		INTEGER (063)	Units of subframes	-	

>Timeslot Resource Related Information	M	BIT STRING(5)	Each bit indicates availability of a timeslot, where the bit 0 corresponds to TS2, the bit 1 is TS3, the bit 3 is TS4 bit 5 corresponds to TS6. The value 1 of a bit indicates that the corresponding timeslot is available. Bit 0 is the first/leftmost bit of	-	
>Start Code	M	TDD Channelisatio n Code 9.2.3.19	the bit string.	-	
>End Code	M	TDD Channelisatio n Code 9.2.3.19		-	
>Transport Block Size Index	M	INTEGER (0 maxnoofTBSs Mapping-1)		-	
>Modulation type	М	ENUMERATE D (QPSK, 16QAM)		-	
>HS-SICH mapping index	М	INTEGER (0 maxnoofHS-SICHforSPS-1)		-	
>HS-PDSCH Midamble Configuration	М	Midamble Shift LCR 9.2.3.7A		YES	reject
Buffer Size for HS- DSCH Semi-Persistent scheduling	O	ENUMERATE D (800304000,)	Indicats the buffer size that shall be reserved for HS-DSCH semipersistent scheduling operation.  800 16000 by step of 800, 17600 32000 by step of 1600, 36000 80000 by step of 4000, 88000 160000 by step of 8000, 176000 304000 by step of 16000	-	
Number of Processes for HS-DSCH Semi- Persistent scheduling	0	INTEGER (116)	5y 3tep 01 10000	-	

Range Bound	Explanation				
maxnoofHS-SICHforSPS	Maximum number of HS-SICH for HS-DSCH Semi-Persistent scheduling operation				
maxnoofTBSsMapping	Maximum number of Transport Block Size mapping index on HS-SCCH.				

### 9.2.3.99 E-DCH Semi-Persistent scheduling Information Response LCR

The *E-DCH Semi-Persistent scheduling Information Response LCR* IE provides information for E-DCH Semi-Persistent scheduling information determined within the Node B (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Allcoated E-DCH Semi-persistent resource		1			-	
>Timeslot Resource Related Information LCR	М		9.2.3.54a		-	
>Power Resource Related Information	M		9.2.3.55		-	
>Repetition Length	M		INTEGER (163))	The IE shall be ignored.	-	
>Subframe Number	M		ENUMERATE D ( 0,1)	Used to indicate from which subframe of the Radio Frame indicated by TDD E-PUCH Offset IE the physical resources are assigned to the E-DCH Non-scheduled Grant.	-	
>TDD E-PUCH Offset	М		9.2.3.56		-	
>TDD Channelisation Code	M		9.2.3.19		-	
>NE-UCCH	М		INTEGER (18)	Number of E- UCCH and TPC instances within an E-DCH TTI. Details are described in [19].	-	
>Repetition Period Index	0		INTEGER (0 maxnoofRepet itionPeriodLC R-1)		YES	ignore

### 9.2.3.100 HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR

The *HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR* IE is used to deactivate HS-DSCH Semi-Persistent scheduling operation for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Semi-Persistent scheduling Deactivate	М		NULL	
Indicator				

## 9.2.3.101 E-DCH Semi-Persistent scheduling Deactivate Indicator LCR

The *E-DCH Semi-Persistent scheduling Deactivate Indicator LCR* IE is used to deactivate E-DCH Semi-Persistent schedulung operation for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Semi-Persistent scheduling Deactivate Indicator	M		NULL	

#### 9.2.3.102 Idle Interval Information

The *Idle Interval Information* IE indicates the idle interval used for E-UTRAN measurements by a multi-RAT UE in CELL\_DCH state. Ref [50].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
K	М		INTEGER (0,2,3)	The actual idle interval period = 2^k. Value "0" means to delete the configuration related to E-UTRAN measurement
Offset	М		INTEGER (07)	The idle interval position in the period. The IE shall be ignored when the value of the KIE is set to '0'

### 9.2.3.103 HS-SICH Reference Signal Information

IE/Group Name	Presence	Range	IE Type and	Semantics	Criticality	Assigned
			Reference	Description		Criticality
Midamble	M		ENUMERATE	As defined in [19]		
Configuration LCR			D (2, 4, 6, 8,			
_			10, 12, 14, 16,			
			)			
Midamble Shift	М		INTEGER			
			(015)			
Time Slot LCR	M		9.2.3.24A			

## 9.2.3.104 UE Selected MBMS Service Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Status	0					
>None			NULL			
>Some						
>>Selected MBMS Service List		1MaxMB MSService Select				
>>>Selected MBMS Service Time Slot Information LCR	М	07		This IE indicates the Time Slot information of UE selected MBMS service in the other frequency. For 1.28Mcps TDD only. Mandatory if the IE UE Selected MBMS Service Action set to Selected. Otherwise optional.	_	
>>>>Time Slot LCR	М		9.2.3.24A		-	
>>>MBMS Service TDM Information		01		Indicating the MBMS service TDM Information		
>>>> Transmission Time Interval	M		ENUMER ATED (10, 20, 40, 80,)	Unit: ms		
>>>>TDM_Rep	M		Integer (29)			
>>>>TDM_Offset	M		Integer (08)			
>>>>TDM_Length	M		Integer (18)			

## 9.3 Message and Information Element Abstract Syntax (with ASN.1)

### 9.3.0 General

Subclause 9.3 presents the Abstract Syntax of NBAP protocol with ASN.1. In case there is contradiction between the ASN.1 definition in this subclause and the tabular format in subclauses 9.1 and 9.2, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

The ASN.1 definition specifies the structure and content of NBAP messages. NBAP messages can contain any IEs specified in the object set definitions for that message without the order or number of occurrence being restricted by ASN.1. However, for this version of the standard, a sending entity shall construct a NBAP message according to the PDU definitions module and with the following additional rules (Note that in the following IE means an IE in the object set with an explicit id. If one IE needed to appear more than once in one object set, then the different occurrences have different IE ids):

- IEs shall be ordered (in an IE container) in the order they appear in object set definitions.
- Object set definitions specify how many times IEs may appear. An IE shall appear exactly once if the presence field in an object has value "mandatory". An IE may appear at most once if the presence field in an object has value "optional" or "conditional". If in a tabular format there is multiplicity specified for an IE (i.e. an IE list) then in the corresponding ASN.1 definition the list definition is separated into two parts. The first part defines an IE container list where the list elements reside. The second part defines list elements. The IE container list appears as an IE of its own. For this version of the standard an IE container list may contain only one kind of list elements.

If a NBAP message that is not constructed as defined above is received, this shall be considered as Abstract Syntax Error, and the message shall be handled as defined for Abstract Syntax Error in subclause 10.3.6.

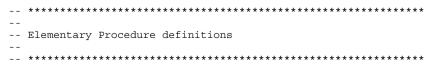
## 9.3.1 Usage of Private Message mechanism for non-standard use

The private message mechanism for non-standard use may be used.

- For special operator- (and/or vendor) specific features considered not to be part of the basic functionality, i.e. the functionality required for a complete and high-quality specification in order to guarantee multi-vendor inter-operability.
- By vendors for research purposes, e.g. to implement and evaluate new algorithms/features before such features are proposed for standardisation.

The private message mechanism shall not be used for basic functionality. Such functionality shall be standardised.

## 9.3.2 Elementary Procedure Definitions



```
NBAP-PDU-Descriptions {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Descriptions (0) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
       ******************
-- IE parameter types from other modules.
__ *********************
IMPORTS
    Criticality,
    ProcedureID,
   MessageDiscriminator,
    TransactionID
FROM NBAP-CommonDataTypes
    CommonTransportChannelSetupRequestFDD,
    CommonTransportChannelSetupRequestTDD,
    CommonTransportChannelSetupResponse,
    CommonTransportChannelSetupFailure,
    CommonTransportChannelReconfigurationRequestFDD,
    CommonTransportChannelReconfigurationRequestTDD,
    CommonTransportChannelReconfigurationResponse,
    CommonTransportChannelReconfigurationFailure,
    CommonTransportChannelDeletionRequest,
    CommonTransportChannelDeletionResponse,
    BlockResourceRequest,
    BlockResourceResponse,
    BlockResourceFailure,
   UnblockResourceIndication,
    AuditFailure,
    AuditRequiredIndication,
    AuditRequest,
    AuditResponse,
    CommonMeasurementInitiationRequest,
    CommonMeasurementInitiationResponse,
    CommonMeasurementInitiationFailure,
    CommonMeasurementReport,
    CommonMeasurementTerminationRequest,
    CommonMeasurementFailureIndication,
    CellSetupRequestFDD,
    CellSetupRequestTDD,
    CellSetupResponse,
    CellSetupFailure,
    CellReconfigurationRequestFDD,
    CellReconfigurationRequestTDD,
    CellReconfigurationResponse,
    CellReconfigurationFailure,
    CellDeletionRequest,
```

CellDeletionResponse, InformationExchangeInitiationRequest, InformationExchangeInitiationResponse, InformationExchangeInitiationFailure, InformationReport, InformationExchangeTerminationRequest, InformationExchangeFailureIndication, BearerRearrangementIndication. ResourceStatusIndication, SystemInformationUpdateRequest, SystemInformationUpdateResponse, SystemInformationUpdateFailure, ResetRequest, ResetResponse, RadioLinkActivationCommandFDD, RadioLinkActivationCommandTDD, RadioLinkPreemptionRequiredIndication, RadioLinkSetupRequestFDD, RadioLinkSetupRequestTDD, RadioLinkSetupResponseFDD, RadioLinkSetupResponseTDD, RadioLinkSetupFailureFDD, RadioLinkSetupFailureTDD, RadioLinkAdditionRequestFDD, RadioLinkAdditionRequestTDD, RadioLinkAdditionResponseFDD, RadioLinkAdditionResponseTDD, RadioLinkAdditionFailureFDD, RadioLinkAdditionFailureTDD, RadioLinkParameterUpdateIndicationFDD, RadioLinkParameterUpdateIndicationTDD, RadioLinkReconfigurationPrepareFDD, RadioLinkReconfigurationPrepareTDD, RadioLinkReconfigurationReady, RadioLinkReconfigurationFailure, RadioLinkReconfigurationCommit, RadioLinkReconfigurationCancel, RadioLinkReconfigurationRequestFDD, RadioLinkReconfigurationRequestTDD, RadioLinkReconfigurationResponse, RadioLinkDeletionRequest, RadioLinkDeletionResponse, DL-PowerControlRequest, DL-PowerTimeslotControlRequest, DedicatedMeasurementInitiationRequest, DedicatedMeasurementInitiationResponse, DedicatedMeasurementInitiationFailure, DedicatedMeasurementReport, DedicatedMeasurementTerminationRequest, DedicatedMeasurementFailureIndication, RadioLinkFailureIndication, RadioLinkRestoreIndication, CompressedModeCommand, ErrorIndication,

PrivateMessage, PhysicalSharedChannelReconfigurationReguestTDD, PhysicalSharedChannelReconfigurationRequestFDD, PhysicalSharedChannelReconfigurationResponse, PhysicalSharedChannelReconfigurationFailure, CellSynchronisationInitiationRequestTDD, CellSynchronisationInitiationResponseTDD, CellSvnchronisationInitiationFailureTDD. CellSynchronisationReconfigurationRequestTDD, CellSynchronisationReconfigurationResponseTDD, CellSynchronisationReconfigurationFailureTDD, CellSynchronisationAdjustmentRequestTDD, CellSynchronisationAdjustmentResponseTDD, CellSynchronisationAdjustmentFailureTDD, CellSynchronisationReportTDD, CellSynchronisationTerminationRequestTDD, CellSynchronisationFailureIndicationTDD, MBMSNotificationUpdateCommand, UEStatusUpdateCommand

#### FROM NBAP-PDU-Contents

id-audit. id-auditRequired, id-blockResource, id-cellDeletion. id-cellReconfiguration, id-cellSetup, id-cellSynchronisationInitiation, id-cellSynchronisationReconfiguration, id-cellSynchronisationReporting, id-cellSynchronisationTermination, id-cellSynchronisationFailure, id-commonMeasurementFailure, id-commonMeasurementInitiation. id-commonMeasurementReport, id-commonMeasurementTermination, id-commonTransportChannelDelete, id-commonTransportChannelReconfigure, id-commonTransportChannelSetup, id-compressedModeCommand, id-dedicatedMeasurementFailure, id-dedicatedMeasurementInitiation, id-dedicatedMeasurementReport, id-dedicatedMeasurementTermination. id-downlinkPowerControl. id-downlinkPowerTimeslotControl, id-errorIndicationForDedicated. id-errorIndicationForCommon, id-informationExchangeFailure, id-informationExchangeInitiation, id-informationReporting, id-informationExchangeTermination, id-BearerRearrangement,

3GPP TS 25.433 version 8.11.0 Release 8

```
id-mBMSNotificationUpdate,
   id-physicalSharedChannelReconfiguration,
   id-privateMessageForDedicated,
    id-privateMessageForCommon,
    id-radioLinkActivation,
   id-radioLinkAddition,
   id-radioLinkDeletion.
   id-radioLinkFailure,
   id-radioLinkParameterUpdate,
   id-radioLinkPreemption,
   id-radioLinkRestoration,
   id-radioLinkSetup,
   id-reset.
   id-resourceStatusIndication.
   id-cellSynchronisationAdjustment,
   id-synchronisedRadioLinkReconfigurationCancellation,
    id-synchronisedRadioLinkReconfigurationCommit,
    id-synchronisedRadioLinkReconfigurationPreparation,
    id-systemInformationUpdate,
    id-unblockResource,
   id-unSynchronisedRadioLinkReconfiguration,
   id-uEStatusUpdate
FROM NBAP-Constants:
     ****************
-- Interface Elementary Procedure Class
NBAP-ELEMENTARY-PROCEDURE ::= CLASS {
    &InitiatingMessage
   &SuccessfulOutcome
                                      OPTIONAL,
   &UnsuccessfulOutcome
                                      OPTIONAL,
    &Outcome
                                      OPTIONAL,
    &messageDiscriminator
                                      MessageDiscriminator,
    &procedureID
                                      ProcedureID
                                                     UNIQUE,
    &criticality
                                      Criticality
                                                     DEFAULT ignore
WITH SYNTAX {
                                      &InitiatingMessage
   INITIATING MESSAGE
                                      &SuccessfulOutcomel
    [SUCCESSFUL OUTCOME
    [UNSUCCESSFUL OUTCOME
                                      &UnsuccessfulOutcomel
                                      &Outcome1
    [OUTCOME
                                      &messageDiscriminator
   MESSAGE DISCRIMINATOR
                                      &procedureID
   PROCEDURE ID
    [CRITICALITY
                                      &criticality]
  *****************
-- Interface PDU Definition
```

```
NBAP-PDU ::= CHOICE {
    initiatingMessage
                            InitiatingMessage,
    succesfulOutcome
                           SuccessfulOutcome,
                           UnsuccessfulOutcome,
    unsuccesfulOutcome
    outcome
                           Outcome,
InitiatingMessage ::= SEQUENCE
    procedureID
                           NBAP-ELEMENTARY-PROCEDURE. & procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
    criticality
                           NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
                           NBAP-ELEMENTARY-PROCEDURE. &messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    messageDiscriminator
    transactionID
                           TransactionID,
                           NBAP-ELEMENTARY-PROCEDURE.&InitiatingMessage({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
SuccessfulOutcome ::= SEQUENCE
    procedureID
                           NBAP-ELEMENTARY-PROCEDURE. &procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
                           NBAP-ELEMENTARY-PROCEDURE. & criticality ({NBAP-ELEMENTARY-PROCEDURES} { @procedureID }),
    criticality
                           NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    messageDiscriminator
    transactionID
                           TransactionID,
                           NBAP-ELEMENTARY-PROCEDURE. &SuccessfulOutcome({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
UnsuccessfulOutcome ::= SEQUENCE {
    procedureID
                           NBAP-ELEMENTARY-PROCEDURE. & procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
    criticality
                           NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
                           NBAP-ELEMENTARY-PROCEDURE. & messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    messageDiscriminator
    transactionID
                           TransactionID.
    value
                           NBAP-ELEMENTARY-PROCEDURE. &UnsuccessfulOutcome ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
Outcome ::= SEQUENCE {
    procedureID
                           NBAP-ELEMENTARY-PROCEDURE.&procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
    criticality
                           NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
                           NBAP-ELEMENTARY-PROCEDURE. &messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    messageDiscriminator
    transactionID
                           TransactionID,
                           NBAP-ELEMENTARY-PROCEDURE.&Outcome ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
               ***********
-- Interface Elementary Procedure List
NBAP-ELEMENTARY-PROCEDURES NBAP-ELEMENTARY-PROCEDURE ::= {
    NBAP-ELEMENTARY-PROCEDURES-CLASS-1
   NBAP-ELEMENTARY-PROCEDURES-CLASS-2
```

```
NBAP-ELEMENTARY-PROCEDURES-CLASS-1 NBAP-ELEMENTARY-PROCEDURE ::= {
    cellSetupFDD
    cellSetupTDD
    cellReconfigurationFDD
    cellReconfigurationTDD
    cellDeletion
    commonTransportChannelSetupFDD
    commonTransportChannelSetupTDD
    commonTransportChannelReconfigureFDD
    commonTransportChannelReconfigureTDD
    commonTransportChannelDelete
    audit.
    blockResource
    radioLinkSetupFDD
    radioLinkSetupTDD
    systemInformationUpdate
    commonMeasurementInitiation
    radioLinkAdditionFDD
    radioLinkAdditionTDD
    radioLinkDeletion
    reset
    {\tt synchronisedRadioLinkReconfigurationPreparationFDD}
    synchronisedRadioLinkReconfigurationPreparationTDD
    unSynchronisedRadioLinkReconfigurationFDD
    unSynchronisedRadioLinkReconfigurationTDD
    dedicatedMeasurementInitiation
    physicalSharedChannelReconfigurationTDD
    informationExchangeInitiation
    cellSynchronisationInitiationTDD
    cellSynchronisationReconfigurationTDD
    cellSynchronisationAdjustmentTDD
    physicalSharedChannelReconfigurationFDD
NBAP-ELEMENTARY-PROCEDURES-CLASS-2 NBAP-ELEMENTARY-PROCEDURE ::=
    resourceStatusIndication
    auditReguired
    commonMeasurementReport
    commonMeasurementTermination
    commonMeasurementFailure
    synchronisedRadioLinkReconfigurationCommit
    synchronisedRadioLinkReconfigurationCancellation
    radioLinkFailure
    radioLinkPreemption
    radioLinkRestoration
    dedicatedMeasurementReport
    dedicatedMeasurementTermination
    dedicatedMeasurementFailure
    downlinkPowerControlFDD
    downlinkPowerTimeslotControl
    compressedModeCommand
    unblockResource
```

```
errorIndicationForDedicated
   errorIndicationForCommon
   privateMessageForDedicated
   privateMessageForCommon
   informationReporting
   informationExchangeTermination
   informationExchangeFailure
   cellSynchronisationReportingTDD
   cellSynchronisationTerminationTDD
   cellSynchronisationFailureTDD
   bearerRearrangement
   radioLinkActivationFDD
   radioLinkActivationTDD
   radioLinkParameterUpdateFDD
   radioLinkParameterUpdateTDD
   mBMSNotificationUpdate
   uEStatusUpdate
     Interface Elementary Procedures
        -- Class 1
-- *** CellSetup (FDD) ***
cellSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
   INITIATING MESSAGE
                          CellSetupRequestFDD
   SUCCESSFUL OUTCOME
                          CellSetupResponse
   UNSUCCESSFUL OUTCOME
                          CellSetupFailure
   MESSAGE DISCRIMINATOR
                          { procedureCode id-cellSetup, ddMode fdd }
   PROCEDURE ID
   CRITICALITY
                          reject
-- *** CellSetup (TDD) ***
cellSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                          CellSetupRequestTDD
   INITIATING MESSAGE
                          CellSetupResponse
   SUCCESSFUL OUTCOME
                          CellSetupFailure
   UNSUCCESSFUL OUTCOME
   MESSAGE DISCRIMINATOR
                          { procedureCode id-cellSetup, ddMode tdd }
   PROCEDURE ID
   CRITICALITY
                          reject
-- *** CellReconfiguration(FDD) ***
cellReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
   INITIATING MESSAGE
                          CellReconfigurationRequestFDD
   SUCCESSFUL OUTCOME
                          CellReconfigurationResponse
                          CellReconfigurationFailure
   UNSUCCESSFUL OUTCOME
```

```
MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-cellReconfiguration, ddMode fdd }
    CRITICALITY
                            reject
-- *** CellReconfiguration(TDD) ***
cellReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CellReconfigurationRequestTDD
    SUCCESSFUL OUTCOME
                            CellReconfigurationResponse
                            CellReconfigurationFailure
    UNSUCCESSFUL OUTCOME
                            common
    MESSAGE DISCRIMINATOR
                            { procedureCode id-cellReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CellDeletion ***
cellDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellDeletionRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CellDeletionResponse
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-cellDeletion, ddMode common }
    CRITICALITY
                            reject
-- *** CommonTransportChannelSetup (FDD) ***
commonTransportChannelSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CommonTransportChannelSetupRequestFDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CommonTransportChannelSetupResponse
                            CommonTransportChannelSetupFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-commonTransportChannelSetup, ddMode fdd }
    CRITICALITY
                            reject
-- *** CommonTransportChannelSetup (TDD) ***
commonTransportChannelSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelSetupRequestTDD
                            CommonTransportChannelSetupResponse
    SUCCESSFUL OUTCOME
                            CommonTransportChannelSetupFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelSetup, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CommonTransportChannelReconfigure (FDD) ***
commonTransportChannelReconfigureFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelReconfigure, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            reject
```

```
-- *** CommonTransportChannelReconfigure (TDD) ***
commonTransportChannelReconfigureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CommonTransportChannelReconfigurationRequestTDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelReconfigure, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
-- *** CommonTransportChannelDelete ***
commonTransportChannelDelete NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelDeletionRequest
    SUCCESSFUL OUTCOME
                            CommonTransportChannelDeletionResponse
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-commonTransportChannelDelete, ddMode common }
    CRITICALITY
                            reject
-- *** Audit ***
audit NBAP-ELEMENTARY-PROCEDURE ::= {
                            AuditRequest
    INITIATING MESSAGE
                            AuditResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            AuditFailure
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-audit, ddMode common
    CRITICALITY
                            reject
-- *** BlockResourceRequest ***
blockResource NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            BlockResourceRequest
    SUCCESSFUL OUTCOME
                            BlockResourceResponse
                            BlockResourceFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-blockResource, ddMode common }
    CRITICALITY
                            reject
-- *** RadioLinkSetup (FDD) ***
radioLinkSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkSetupRequestFDD
                            RadioLinkSetupResponseFDD
    SUCCESSFUL OUTCOME
                            RadioLinkSetupFailureFDD
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-radioLinkSetup, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
-- *** RadioLinkSetup (TDD) ***
radioLinkSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkSetupRequestTDD
                            RadioLinkSetupResponseTDD
    SUCCESSFUL OUTCOME
                            RadioLinkSetupFailureTDD
    UNSUCCESSFUL OUTCOME
```

```
MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-radioLinkSetup, ddMode tdd }
    CRITICALITY
                            reject
-- *** SystemInformationUpdate ***
systemInformationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            SystemInformationUpdateRequest
    SUCCESSFUL OUTCOME
                            SystemInformationUpdateResponse
                            SystemInformationUpdateFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-systemInformationUpdate, ddMode common
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** Reset ***
reset NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ResetRequest
    SUCCESSFUL OUTCOME
                            ResetResponse
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-reset, ddMode common }
                            reject
    CRITICALITY
-- *** CommonMeasurementInitiation ***
commonMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
                            CommonMeasurementInitiationRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CommonMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME
                            CommonMeasurementInitiationFailure
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-commonMeasurementInitiation, ddMode common }
    CRITICALITY
                            reject
-- *** RadioLinkAddition (FDD) ***
radioLinkAdditionFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkAdditionRequestFDD
    INITIATING MESSAGE
                            RadioLinkAdditionResponseFDD
    SUCCESSFUL OUTCOME
                            RadioLinkAdditionFailureFDD
    UNSUCCESSFUL OUTCOME
                            dedicated
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-radioLinkAddition, ddMode fdd }
    CRITICALITY
-- *** RadioLinkAddition (TDD) ***
radioLinkAdditionTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkAdditionRequestTDD
    SUCCESSFUL OUTCOME
                            RadioLinkAdditionResponseTDD
                            RadioLinkAdditionFailureTDD
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-radioLinkAddition, ddMode tdd }
    CRITICALITY
                            reject
```

```
-- *** RadioLinkDeletion
radioLinkDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkDeletionRequest
                            RadioLinkDeletionResponse
    SUCCESSFUL OUTCOME
   MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-radioLinkDeletion, ddMode common }
    CRITICALITY
-- *** SynchronisedRadioLinkReconfigurationPreparation (FDD) ***
synchronisedRadioLinkReconfigurationPreparationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationPrepareFDD
                            RadioLinkReconfigurationReady
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
                            dedicated
    MESSAGE DISCRIMINATOR
                            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
-- *** SynchronisedRadioLinkReconfigurationPreparation (TDD) ***
synchronisedRadioLinkReconfigurationPreparationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkReconfigurationPrepareTDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationReady
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
                            dedicated
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
    CRITICALITY
                            reject
-- *** UnSynchronisedRadioLinkReconfiguration (FDD) ***
unSynchronisedRadioLinkReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            RadioLinkReconfigurationRequestFDD
                            RadioLinkReconfigurationResponse
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** UnSynchronisedRadioLinkReconfiguration (TDD) ***
unSynchronisedRadioLinkReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::=
                            RadioLinkReconfigurationRequestTDD
    INITIATING MESSAGE
                            RadioLinkReconfigurationResponse
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
    CRITICALITY
-- *** DedicatedMeasurementInitiation ***
dedicatedMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
                            DedicatedMeasurementInitiationRequest
    INITIATING MESSAGE
```

```
DedicatedMeasurementInitiationResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            DedicatedMeasurementInitiationFailure
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
    CRITICALITY
                            reject
-- *** PhysicalSharedChannelReconfiguration (FDD) ***
physicalSharedChannelReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                                PhysicalSharedChannelReconfigurationRequestFDD
    INITIATING MESSAGE
                                PhysicalSharedChannelReconfigurationResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                                PhysicalSharedChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                                { procedureCode id-physicalSharedChannelReconfiguration, ddMode fdd }
    CRITICALITY
                                reject
-- *** PhysicalSharedChannelReconfiguration (TDD) ***
physicalSharedChannelReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::=
                                PhysicalSharedChannelReconfigurationRequestTDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                                PhysicalSharedChannelReconfigurationResponse
                                PhysicalSharedChannelReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                                { procedureCode id-physicalSharedChannelReconfiguration, ddMode tdd }
    CRITICALITY
-- *** InformationExchangeInitiation ***
informationExchangeInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
                            {\tt InformationExchangeInitiationRequest}
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            InformationExchangeInitiationResponse
                            InformationExchangeInitiationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-informationExchangeInitiation, ddMode common }
    CRITICALITY
                            reject
-- *** CellSynchronisationInitiation (TDD only) ***
cellSynchronisationInitiationTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                                CellSynchronisationInitiationRequestTDD
    SUCCESSFUL OUTCOME
                                CellSynchronisationInitiationResponseTDD
    UNSUCCESSFUL OUTCOME
                                CellSynchronisationInitiationFailureTDD
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                                { procedureCode id-cellSynchronisationInitiation, ddMode tdd }
    CRITICALITY
                                reject
-- *** CellSynchronisationReconfiguration (TDD only) ***
cellSynchronisationReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                                CellSynchronisationReconfigurationRequestTDD
    INITIATING MESSAGE
                                CellSynchronisationReconfigurationResponseTDD
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                                CellSynchronisationReconfigurationFailureTDD
    MESSAGE DISCRIMINATOR
                                { procedureCode id-cellSynchronisationReconfiguration, ddMode tdd }
    PROCEDURE ID
```

```
CRITICALITY
                                reject
-- *** CellSynchronisationAdjustment (TDD only) ***
cellSynchronisationAdjustmentTDD NBAP-ELEMENTARY-PROCEDURE ::=
                               CellSynchronisationAdjustmentRequestTDD
    INITIATING MESSAGE
                               CellSynchronisationAdjustmentResponseTDD
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                               CellSynchronisationAdjustmentFailureTDD
    MESSAGE DISCRIMINATOR
                                { procedureCode id-cellSynchronisationAdjustment, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
-- Class 2
-- *** ResourceStatusIndication ***
resourceStatusIndication NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ResourceStatusIndication
    MESSAGE DISCRIMINATOR
                            { procedureCode id-resourceStatusIndication, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** AuditRequired ***
auditRequired NBAP-ELEMENTARY-PROCEDURE ::=
                            AuditRequiredIndication
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                              procedureCode id-auditRequired, ddMode common }
    CRITICALITY
                            ignore
-- *** CommonMeasurementReport ***
commonMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementReport
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-commonMeasurementReport, ddMode common }
    CRITICALITY
                            ignore
-- *** CommonMeasurementTermination ***
commonMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementTerminationRequest
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-commonMeasurementTermination, ddMode common }
    CRITICALITY
                            ignore
-- *** CommonMeasurementFailure ***
commonMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
                            CommonMeasurementFailureIndication
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                              procedureCode id-commonMeasurementFailure, ddMode common }
    CRITICALITY
                            ignore
```

```
-- *** SynchronisedRadioLinkReconfigurationCommit ***
synchronisedRadioLinkReconfigurationCommit NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationCommit
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    PROCEDURE ID
    CRITICALITY
-- *** SynchronisedRadioReconfigurationCancellation ***
synchronisedRadioLinkReconfigurationCancellation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationCancel
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common
                            ignore
    CRITICALITY
-- *** RadioLinkFailure ***
radioLinkFailure NBAP-ELEMENTARY-PROCEDURE ::=
                            RadioLinkFailureIndication
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkFailure, ddMode common
    PROCEDURE ID
    CRITICALITY
-- *** RadioLinkPreemption ***
radioLinkPreemption NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                                RadioLinkPreemptionRequiredIndication
    MESSAGE DISCRIMINATOR
                                dedicated
                                { procedureCode id-radioLinkPreemption, ddMode common }
    PROCEDURE ID
    CRITICALITY
-- *** RadioLinkRestoration ***
radioLinkRestoration NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            RadioLinkRestoreIndication
   MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-radioLinkRestoration, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** DedicatedMeasurementReport ***
dedicatedMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
                            {\tt Dedicated Measurement Report}
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-dedicatedMeasurementReport, ddMode common }
    CRITICALITY
                            ignore
-- *** DedicatedMeasurementTermination ***
dedicatedMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DedicatedMeasurementTerminationRequest
   MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    PROCEDURE ID
```

```
CRITICALITY
                            ignore
-- *** DedicatedMeasurementFailure ***
dedicatedMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::=
                            DedicatedMeasurementFailureIndication
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR dedicated
    PROCEDURE ID
                            { procedureCode id-dedicatedMeasurementFailure, ddMode common }
    CRITICALITY
-- *** DLPowerControl (FDD only) ***
downlinkPowerControlFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DL-PowerControlRequest
                           dedicated
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-downlinkPowerControl, ddMode fdd }
    CRITICALITY
                            ignore
-- *** DLPowerTimeslotControl (TDD only) ***
downlinkPowerTimeslotControl NBAP-ELEMENTARY-PROCEDURE ::= {
                            DL-PowerTimeslotControlRequest
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CompressedModeCommand (FDD only) ***
compressedModeCommand NBAP-ELEMENTARY-PROCEDURE ::= {
                            CompressedModeCommand
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-compressedModeCommand, ddMode fdd }
    CRITICALITY
                            ignore
-- *** UnblockResourceIndication ***
unblockResource NBAP-ELEMENTARY-PROCEDURE ::= {
                            UnblockResourceIndication
    INITIATING MESSAGE
                            common
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-unblockResource, ddMode common }
    CRITICALITY
                            ignore
-- *** ErrorIndication for Dedicated procedures ***
errorIndicationForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
                            ErrorIndication
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-errorIndicationForDedicated, ddMode common }
    PROCEDURE ID
    CRITICALITY
-- *** ErrorIndication for Common procedures ***
errorIndicationForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ErrorIndication
```

```
MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-errorIndicationForCommon, ddMode common }
    CRITICALITY
-- *** CellSynchronisationReporting (TDD only) ***
cellSynchronisationReportingTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CellSynchronisationReportTDD
    MESSAGE DISCRIMINATOR
                            { procedureCode id-cellSynchronisationReporting, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CellSynchronisationTermination (TDD only) ***
cellSynchronisationTerminationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CellSynchronisationTerminationRequestTDD
    MESSAGE DISCRIMINATOR
                            { procedureCode id-cellSynchronisationTermination, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CellSynchronisationFailure (TDD only) ***
cellSynchronisationFailureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CellSynchronisationFailureIndicationTDD
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-cellSynchronisationFailure, ddMode tdd }
    CRITICALITY
                            ignore
-- *** PrivateMessage for Dedicated procedures ***
privateMessageForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            PrivateMessage
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-privateMessageForDedicated, ddMode common }
    CRITICALITY
                            ignore
-- *** PrivateMessage for Common procedures ***
privateMessageForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            PrivateMessage
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-privateMessageForCommon, ddMode common }
    CRITICALITY
                            ignore
-- *** InformationReporting ***
informationReporting NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            InformationReport
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-informationReporting, ddMode common }
    CRITICALITY
                            ignore
-- *** InformationExchangeTermination ***
```

690

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informationExchangeTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeTerminationReguest
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                              procedureCode id-informationExchangeTermination, ddMode common
    CRITICALITY
                            ignore
-- *** InformationExchangeFailure ***
informationExchangeFailure NBAP-ELEMENTARY-PROCEDURE ::= {
                            InformationExchangeFailureIndication
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                            { procedureCode id-informationExchangeFailure, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** BearerRearrangement ***
bearerRearrangement NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            BearerRearrangementIndication
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-BearerRearrangement, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** RadioLinkActivation (FDD) ***
radioLinkActivationFDD NBAP-ELEMENTARY-PROCEDURE ::=
                            RadioLinkActivationCommandFDD
    INITIATING MESSAGE
                            dedicated
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-radioLinkActivation, ddMode fdd
    CRITICALITY
                            ignore
-- *** RadioLinkActivation (TDD) ***
radioLinkActivationTDD NBAP-ELEMENTARY-PROCEDURE ::=
                            RadioLinkActivationCommandTDD
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-radioLinkActivation, ddMode tdd }
    CRITICALITY
                            ignore
-- *** RadioLinkParameterUpdate (FDD) ***
radioLinkParameterUpdateFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkParameterUpdateIndicationFDD
                            dedicated
    MESSAGE DISCRIMINATOR
                            { procedureCode id-radioLinkParameterUpdate, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** RadioLinkParameterUpdate (TDD) ***
radioLinkParameterUpdateTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkParameterUpdateIndicationTDD
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                             procedureCode id-radioLinkParameterUpdate, ddMode tdd }
    CRITICALITY
                            ignore
```

```
-- *** MBMSNotificationUpdate ***
mBMSNotificationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           MBMSNotificationUpdateCommand
    MESSAGE DISCRIMINATOR common
                            { procedureCode id-mBMSNotificationUpdate, ddMode common }
    PROCEDURE ID
    CRITICALITY
                           ignore
-- *** UEStatusUpdate ***
uEStatusUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            UEStatusUpdateCommand
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-uEStatusUpdate, ddMode common }
    CRITICALITY
END
```

## 9.3.3 PDU Definitions

```
-- PDU definitions for NBAP.
__ *******************
NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
   ************
-- IE parameter types from other modules.
__ **********************
   Active-Pattern-Sequence-Information,
   AddorDeleteIndicator,
   AICH-Power,
   AICH-TransmissionTiming,
   AllocationRetentionPriority,
   AlternativeFormatReportingIndicator,
   AvailabilityStatus,
   BCCH-ModificationTime,
   BindingID,
   BlockingPriorityIndicator,
   BroadcastReference,
   SCTD-Indicator,
```

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Cause,
CCTrCH-ID.
Cell-ERNTI-Status-Information.
CellParameterID,
CellPortionID.
CellSyncBurstCode,
CellSyncBurstCodeShift,
CellSyncBurstRepetitionPeriod,
CellSyncBurstSIR,
CellSyncBurstTiming,
CellSyncBurstTimingThreshold,
CFN.
ChipOffset,
C-ID.
Closedlooptimingadjustmentmode,
CommonChannelsCapacityConsumptionLaw,
Compressed-Mode-Deactivation-Flag,
Common-MACFlows-to-DeleteFDD,
CommonMeasurementAccuracy,
CommonMeasurementType,
CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
CommonPhysicalChannelID768,
Common-EDCH-Capability,
Common-E-DCH-HSDPCCH-Capability,
Common-EDCH-System-InformationFDD,
Common-EDCH-System-Information-ResponseFDD,
Common-PhysicalChannel-Status-Information,
Common-PhysicalChannel-Status-Information768,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
ContinuousPacketConnectivityDTX-DRX-Capability,
Continuous Packet Connectivity DTX-DRX-Information,
ContinuousPacketConnectivityHS-SCCH-less-Capability,
ContinuousPacketConnectivityHS-SCCH-less-Information,
ContinuousPacketConnectivityHS-SCCH-less-Information-Response,
ContinuousPacketConnectivity-DRX-CapabilityLCR,
ContinuousPacketConnectivity-DRX-InformationLCR,
ContinuousPacketConnectivity-DRX-Information-ResponseLCR,
CPC-InformationLCR,
CPC-Information,
CriticalityDiagnostics,
CRNC-CommunicationContextID,
CSBMeasurementID,
CSBTransmissionID,
DCH-FDD-Information,
DCH-Indicator-For-E-DCH-HSDPA-Operation,
DCH-InformationResponse,
DCH-ID,
```

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FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information.
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DelayedActivation.
DelayedActivationUpdate,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-DPCH-TimingAdjustment,
DL-or-Global-CapacityCredit,
DL-Power,
DL-PowerBalancing-Information,
DL-PowerBalancing-ActivationIndicator,
DLPowerAveragingWindowSize,
DL-PowerBalancing-UpdatedIndicator,
DL-ScramblingCode,
DL-TimeslotISCP.
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo.
DL-TimeslotISCPInfoLCR.
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,
DPCH-ID768,
DSCH-ID,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
E-AGCH-FDD-Code-Information,
E-AI-Capability,
E-DCH-Capability,
E-DCHCapacityConsumptionLaw,
E-DCH-TTI2ms-Capability,
E-DCH-SF-Capability,
E-DCH-HARO-Combining-Capability,
E-DCH-FDD-DL-Control-Channel-Information,
E-DCH-FDD-Information,
E-DCH-FDD-Information-Response,
E-DCH-FDD-Information-to-Modify,
E-DCH-FDD-Update-Information,
E-DCH-MACdFlow-ID,
E-DCH-MACdFlows-Information,
E-DCH-MACdFlows-to-Delete,
E-DCH-MACdPDU-SizeCapability,
E-DCH-RL-Indication,
E-DCH-Serving-Cell-Change-Info-Response,
E-DPCCH-PO,
E-RGCH-E-HICH-FDD-Code-Information,
E-RGCH-2-IndexStepThreshold,
```

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E-RGCH-3-IndexStepThreshold,
End-Of-Audit-Sequence-Indicator,
Enhanced-FACH-Capability,
Enhanced-PCH-Capability,
Enhanced-UE-DRX-Capability,
Enhanced-UE-DRX-InformationFDD,
E-TFCS-Information,
E-TTI.
ExtendedPropagationDelay,
Fast-Reconfiguration-Mode,
Fast-Reconfiguration-Permission,
FDD-DL-ChannelisationCodeNumber.
FDD-DL-CodeInformation.
FDD-S-CCPCH-FrameOffset.
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
F-DPCH-Capability,
F-DPCH-SlotFormat,
F-DPCH-SlotFormatCapability,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
HARO-Info-for-E-DCH,
HSDPA-Capability,
HSDSCH-Common-System-InformationFDD,
HSDSCH-Common-System-Information-ResponseFDD,
HSDSCH-Configured-Indicator,
HSDSCH-Paging-System-InformationFDD,
HSDSCH-Paging-System-Information-ResponseFDD,
HS-DSCH-Serving-Cell-Change-Info,
HS-DSCH-Serving-Cell-Change-Info-Response,
HSDSCH-MACdPDU-SizeCapability,
HS-PDSCH-FDD-Code-Information,
HS-SCCH-ID.
HS-SCCH-FDD-Code-Information,
HS-SICH-ID,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
Initial-DL-DPCH-TimingAdjustment-Allowed,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
IPDL-TDD-Parameters-LCR,
IPMulticastIndication,
```

```
LimitedPowerIncrease,
Local-Cell-ID.
MaximumDL-PowerCapability,
Maximum-Target-ReceivedTotalWideBandPower,
MaximumTransmissionPower.
MaxNrOfUL-DPDCHs,
Max-Set-E-DPDCHs,
MaxPRACH-MidambleShifts,
Max-UE-DTX-Cycle,
MBMS-Capability,
MeasurementFilterCoefficient,
MeasurementID,
MeasurementRecoveryBehavior,
MeasurementRecoveryReportingIndicator,
MeasurementRecoverySupportIndicator,
MICH-CFN,
MICH-Mode,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftAndBurstType768,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MIMO-Capability,
MIMO-PilotConfiguration,
MinUL-ChannelisationCodeLength,
Modification-Period,
MultiplexingPosition,
NCyclesPerSFNperiod,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation.
NI-Information,
NodeB-CommunicationContextID,
NotificationIndicatorLength,
NumberOfReportedCellPortions,
NSubCyclesPerCyclePeriod,
PagingIndicatorLength,
Paging-MACFlows-to-DeleteFDD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PDSCHSet-ID,
PDSCH-ID.
PDSCH-ID768,
PICH-Mode,
PICH-Power,
PLCCHinformation,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
```

```
PreambleSignatures,
PreambleThreshold,
PredictedSFNSFNDeviationLimit.
PredictedTUTRANGPSDeviationLimit,
PrimaryCPICH-Power,
Primary-CPICH-Usage-for-Channel-Estimation,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
OE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers,
Reference-ReceivedTotalWideBandPower,
Reference-ReceivedTotalWideBandPowerReporting,
Reference-ReceivedTotalWideBandPowerSupportIndicator,
Maximum-Target-ReceivedTotalWideBandPower-LCR,
ReferenceClockAvailability,
ReferenceSFNoffset,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
RequestedDataValue,
RequestedDataValueInformation,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
RL-Specific-DCH-Info,
RL-Specific-E-DCH-Info,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdiustmentStep.
RNC-ID.
ScramblingCodeNumber,
Secondary-CPICH-Information-Change,
SecondaryCCPCH-SlotFormat,
Segment-Type,
Semi-PersistentScheduling-CapabilityLCR,
Serving-E-DCH-RL-ID,
SixteenQAM-UL-Capability,
SixtyfourQAM-DL-Capability,
SixtyfourQAM-DL-MIMO-Combined-Capability,
SFN.
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateQuality,
SFNSFNOuality,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SignallingBearerRequestIndicator,
```

```
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
E-DPCCH-Power-Boosting-Capability,
SyncCase,
SYNCDlCodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio,
T-Cell,
T-RLFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR.
TDD-ChannelisationCode768,
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS.
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
TnlOos,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
TransmitDiversitvIndicator,
TransmissionGapPatternSequenceCodeInformation,
Transmission-Gap-Pattern-Sequence-Information,
TransportBearerRequestIndicator,
TransportFormatSet,
TransportLayerAddress,
TSTD-Indicator,
TUTRANGPS,
TUTRANGPSChangeLimit,
TUTRANGPSDriftRate,
TUTRANGPSDriftRateQuality,
TUTRANGPSQuality,
UARFCN,
UC-Id,
USCH-Information,
USCH-InformationResponse,
UL-CapacityCredit,
UL-DPCCH-SlotFormat,
UL-DPDCH-Indicator-For-E-DCH-Operation,
UL-SIR,
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UL-FP-Mode,
UL-PhysCH-SF-Variation,
UL-ScramblingCode.
UL-Timeslot-Information,
UL-TimeslotLCR-Information.
UL-TimeSlot-ISCP-Info,
UL-TimeSlot-ISCP-LCR-Info,
UL-TimeslotISCP-Value,
UL-TimeslotISCP-Value-IncrDecrThres.
USCH-ID,
HSDSCH-FDD-Information,
HSDSCH-FDD-Information-Response,
HSDSCH-Information-to-Modify,
HSDSCH-Information-to-Modify-Unsynchronised,
HSDSCH-MACdFlow-ID,
HSDSCH-MACdFlows-Information,
HSDSCH-MACdFlows-to-Delete,
HSDSCH-RNTI,
HSDSCH-TDD-Information,
HSDSCH-TDD-Information-Response,
PrimaryCCPCH-RSCP,
HSDSCH-FDD-Update-Information,
HSDSCH-TDD-Update-Information,
UL-Synchronisation-Parameters-LCR.
TDD-DL-DPCH-TimeSlotFormat-LCR,
TDD-UL-DPCH-TimeSlotFormat-LCR,
TDD-TPC-UplinkStepSize-LCR,
CellSyncBurstTimingLCR,
TimingAdjustmentValueLCR,
PrimaryCCPCH-RSCP-Delta,
SynchronisationIndicator,
TDD-UL-Code-768-Information,
UL-Timeslot768-Information,
TDD-DL-Code-768-Information,
DL-Timeslot768-Information,
E-DCH-TDD-CapacityConsumptionLaw,
E-DCH-Information,
E-DCH-Information-Response,
E-DCH-Information-Reconfig,
LTGI-Presence,
SNPL-Reporting-Type,
E-AGCH-Id,
E-HICH-TimeOffset,
Maximum-Generated-ReceivedTotalWideBandPowerInOtherCells,
E-DCH-768-Information,
E-DCH-768-Information-Reconfig,
RTWP-ReportingIndicator,
RTWP-CellPortion-ReportingIndicator,
MAChs-ResetIndicator,
E-DCH-LCR-Information,
E-DCH-LCR-Information-Reconfig,
E-HICH-ID-TDD,
E-HICH-TimeOffsetLCR,
E-HICH-Type,
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ModulationPO-MBSFN,
Secondary-CCPCH-SlotFormat-Extended,
ModulationMBSFN.
MBSFN-Only-Mode-Indicator,
MBSFN-Only-Mode-Capability,
UPPCHPositionLCR,
ControlGAP,
IdleIntervalInformation,
Extended-HS-SICH-ID.
Extended-HS-SCCH-ID,
TimeslotLCR-Extension,
Extended-E-HICH-ID-TDD,
AdditionalTimeSlotListLCR.
Additional Measurement Value List.
HS-SCCH-ID-LCR,
Paging-MACFlows-to-DeleteLCR,
HSDSCH-Paging-System-InformationLCR,
HSDSCH-Paging-System-Information-ResponseLCR,
HSDSCH-Common-System-InformationLCR,
HSDSCH-Common-System-Information-ResponseLCR,
Enhanced-UE-DRX-InformationLCR,
E-DCH-MACdFlow-ID-LCR,
Common-EDCH-System-InformationLCR,
Common-EDCH-System-Information-ResponseLCR,
Common-MACFlows-to-DeleteLCR,
DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst,
E-DCH-MACdFlows-to-DeleteLCR,
HSDSCH-PreconfigurationSetup,
HSDSCH-PreconfigurationInfo,
NoOfTargetCellHS-SCCH-Order,
EnhancedHSServingCC-Abort,
GANSS-Time-ID,
HS-DSCH-FDD-Secondary-Serving-Update-Information,
HS-DSCH-Secondary-Serving-Remove,
HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised.
HS-DSCH-Secondary-Serving-Information-To-Modify,
HS-DSCH-Secondary-Serving-Cell-Change-Information-Response,
HS-DSCH-FDD-Secondary-Serving-Information-Response,
HS-DSCH-FDD-Secondary-Serving-Information,
Multi-Cell-Capability-Info,
MinimumReducedE-DPDCH-GainFactor,
IMB-Parameters.
E-RNTI,
E-DCH-Semi-PersistentScheduling-Information-LCR,
HS-DSCH-Semi-PersistentScheduling-Information-LCR,
Add-To-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst,
Modify-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst,
Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst,
Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst-Ext,
HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR,
E-DCH-Semi-PersistentScheduling-Information-ResponseLCR,
HSSICH-ReferenceSignal-InformationLCR,
UE-Selected-MBMS-Service-Information,
HSSICH-ReferenceSignal-InformationModifyLCR,
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TimeSlotMeasurementValueListLCR,
   MIMO-PowerOffsetForS-CPICHCapability.
   MIMO-PilotConfigurationExtension.
    TxDiversityOnDLControlChannelsByMIMOUECapability,
    Cell-Capability-Container,
    Out-of-Sychronization-Window,
    PrecodingWeightSetRestriction,
    Non-Serving-RL-Preconfig-Setup,
    Non-Serving-RL-Preconfig-Info
FROM NBAP-IEs
    PrivateIE-Container{},
    ProtocolExtensionContainer{},
    ProtocolIE-Container{},
    ProtocolIE-Single-Container{},
    ProtocolIE-ContainerList{},
    NBAP-PRIVATE-IES,
   NBAP-PROTOCOL-IES,
    NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers
    id-Active-Pattern-Sequence-Information,
    id-Additional-S-CCPCH-Parameters-CTCH-ReconfRqstTDD,
    id-Additional-S-CCPCH-Parameters-CTCH-SetupRgstTDD,
    id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRgstTDD,
    id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRgstTDD,
    id-AdjustmentRatio,
    id-AICH-Information,
    id-AICH-ParametersListIE-CTCH-ReconfRgstFDD,
    id-AlternativeFormatReportingIndicator,
    id-BCH-Information.
    id-BCCH-ModificationTime,
    id-bindingID,
    id-BlockingPriorityIndicator,
    id-BroadcastReference,
    id-Cause,
    id-CauseLevel-PSCH-ReconfFailure,
    id-CauseLevel-RL-AdditionFailureFDD,
    id-CauseLevel-RL-AdditionFailureTDD,
    id-CauseLevel-RL-ReconfFailure,
    id-CauseLevel-RL-SetupFailureFDD,
    id-CauseLevel-RL-SetupFailureTDD,
    id-CauseLevel-SvncAdjustmntFailureTDD.
    id-CCP-InformationItem-AuditRsp,
    id-CCP-InformationList-AuditRsp.
    id-CCP-InformationItem-ResourceStatusInd,
    id-CCTrCH-InformationItem-RL-FailureInd,
    id-CCTrCH-InformationItem-RL-RestoreInd,
    id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD,
    id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD,
    id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD,
    id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
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id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD,
id-Cell-ERNTI-Status-Information.
id-Cell-InformationItem-AuditRsp.
id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CellPortion-InformationItem-Cell-SetupRqstFDD,
id-CellPortion-InformationList-Cell-SetupRastFDD,
id-CellPortion-InformationItem-Cell-ReconfRqstFDD,
id-CellPortion-InformationList-Cell-ReconfRqstFDD,
id-CellSyncBurstTransInit-CellSyncInitiationRgstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfiguration-CellSyncReconfRgstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRgstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRgstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRgstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-Common-EDCH-Capability,
id-Common-E-DCH-HSDPCCH-Capability,
id-Common-EDCH-MACdFlows-to-DeleteFDD,
id-Common-EDCH-System-InformationFDD,
id-Common-EDCH-System-Information-ResponseFDD,
id-Common-MACFlows-to-DeleteFDD,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRgstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRgstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRgstTDD,
id-Common-UL-MACFlows-to-DeleteFDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-ContinuousPacketConnectivitvDTX-DRX-Capability,
id-ContinuousPacketConnectivityDTX-DRX-Information,
id-ContinuousPacketConnectivitvHS-SCCH-less-Capability,
id-ContinuousPacketConnectivityHS-SCCH-less-Information,
id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response,
id-ContinuousPacketConnectivity-DRX-CapabilityLCR,
id-ContinuousPacketConnectivity-DRX-InformationLCR,
id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR,
id-CPC-InformationLCR,
id-CPC-Information,
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id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID.
id-CSBMeasurementID.
id-DCHs-to-Add-FDD.
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD.
id-DCH-DeleteList-RL-ReconfPrepFDD.
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information.
id-DCH-Indicator-For-E-DCH-HSDPA-Operation.
id-DCH-InformationResponse,
id-DCH-RearrangeList-Bearer-RearrangeInd,
id-DSCH-RearrangeList-Bearer-RearrangeInd,
id-FDD-DCHs-to-Modify,
id-FDD-S-CCPCH-FrameOffset-CTCH-SetupRgstFDD,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementTvpe,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRgstFDD,
id-DL-DPCH-Information-RL-SetupRgstFDD,
id-DL-DPCH-TimingAdjustment,
id-DL-DPCH-Power-Information-RL-ReconfPrepFDD,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DL-PowerBalancing-UpdatedIndicator,
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id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rast.
id-DL-TPC-Pattern01Count.
id-DPC-Mode.
id-DPCHConstant.
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-TDD-Information,
id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code,
id-E-AI-Capability,
id-E-AGCH-FDD-Code-Information,
id-E-DCH-Capability,
id-E-DCH-TTI2ms-Capability,
id-E-DCH-SF-Capability,
id-E-DCH-HARO-Combining-Capability,
id-E-DCH-FDD-DL-Control-Channel-Information,
id-E-DCH-FDD-Information,
id-E-DCH-FDD-Information-Response,
id-E-DCH-FDD-Information-to-Modify,
id-E-DCH-FDD-Update-Information,
id-E-DCH-MACdFlows-to-Add,
id-E-DCH-MACdFlows-to-Delete,
id-E-DCH-RearrangeList-Bearer-RearrangeInd,
id-E-DCH-Resources-Information-AuditRsp,
id-E-DCH-Resources-Information-ResourceStatusInd,
id-E-DCH-RL-Indication,
id-E-DCH-RL-Set-ID,
id-E-DCH-Serving-Cell-Change-Info-Response,
id-E-DCH-CapacityConsumptionLaw,
id-E-DPCH-Information-RL-ReconfPrepFDD,
id-E-DPCH-Information-RL-ReconfRqstFDD,
id-E-DPCH-Information-RL-SetupRqstFDD,
id-E-DPCH-Information-RL-AdditionRegFDD,
id-E-RGCH-E-HICH-FDD-Code-Information.
id-ERACH-CM-Rgst,
id-ERACH-CM-Rsp,
id-ERACH-CM-Rprt,
id-End-Of-Audit-Sequence-Indicator,
id-Enhanced-FACH-Capability,
id-Enhanced-PCH-Capability,
id-Enhanced-UE-DRX-Capability,
id-Enhanced-UE-DRX-InformationFDD,
id-ExtendedPropagationDelay.
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRgstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRgstFDD,
id-FACH-ParametersListIE-CTCH-SetupRgstTDD,
id-Fast-Reconfiguration-Mode,
id-Fast-Reconfiguration-Permission,
id-F-DPCH-Capability,
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id-F-DPCH-Information-RL-ReconfPrepFDD,
id-F-DPCH-Information-RL-SetupRastFDD.
id-F-DPCH-SlotFormat.
id-F-DPCH-SlotFormatCapability,
id-HSDPA-And-EDCH-CellPortion-Information-PSCH-ReconfRost.
id-HSDSCH-Configured-Indicator,
id-HS-DSCH-Serving-Cell-Change-Info,
id-HS-DSCH-Serving-Cell-Change-Info-Response,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rgst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType,
id-InitDL-Power,
id-Initial-DL-DPCH-TimingAdjustment,
id-Initial-DL-DPCH-TimingAdjustment-Allowed,
id-InnerLoopDLPCStatus,
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRgstFDD,
id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRgstTDD,
id-IPDLParameter-Information-Cell-SetupRgstTDD.
id-IPMulticastIndication,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRgstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp.
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-Max-UE-DTX-Cycle,
id-MeasurementFilterCoefficient,
id-MeasurementID.
id-MeasurementRecoveryBehavior,
id-MeasurementRecoveryReportingIndicator,
id-MeasurementRecovervSupportIndicator,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRgst,
id-MBMS-Capability,
id-MICH-CFN,
id-MICH-Information-AuditRsp,
id-MICH-Information-ResourceStatusInd,
id-MICH-Parameters-CTCH-ReconfRgstFDD,
id-MICH-Parameters-CTCH-ReconfRgstTDD,
id-MICH-Parameters-CTCH-SetupRqstFDD,
id-MICH-Parameters-CTCH-SetupRqstTDD,
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id-MIMO-Capability,
id-MIMO-PilotConfiguration.
id-Modification-Period.
id-multipleRL-dl-DPCH-InformationList,
id-multipleRL-dl-DPCH-InformationModifyList,
id-multipleRL-dl-CCTrCH-InformationModifyList-RL-ReconfRgstTDD,
id-multiple-RL-Information-RL-ReconfPrepTDD,
id-multiple-RL-Information-RL-ReconfRastTDD,
id-multipleRL-ul-DPCH-InformationList,
id-multipleRL-ul-DPCH-InformationModifyList,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NI-Information-NotifUpdateCmd,
id-NodeB-CommunicationContextID.
id-NRepetitionsPerCyclePeriod,
id-NumberOfReportedCellPortions,
id-Paging-MACFlows-to-DeleteFDD,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRgstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRgstTDD,
id-PCH-Parameters-CTCH-SetupRsp.
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRgstFDD,
id-PCH-ParametersItem-CTCH-SetupRgstTDD,
id-PCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRgstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRgst,
id-PDSCH-RL-ID.
id-PDSCH-Timeslot-Format-PSCH-ReconfRqst-LCR,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRast,
id-PDSCHSets-ModifyList-PSCH-ReconfRast,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRgstTDD,
id-PLCCH-Information-AuditRsp,
id-PLCCH-Information-ResourceStatusInd,
id-PLCCH-Information-RL-ReconfPrepTDDLCR,
id-PLCCH-InformationList-AuditRsp,
id-PLCCH-InformationList-ResourceStatusInd,
id-PLCCH-Parameters-CTCH-ReconfRgstTDD,
id-PowerAdjustmentType,
id-Power-Local-Cell-Group-choice-CM-Rgst,
id-Power-Local-Cell-Group-choice-CM-Rsp,
id-Power-Local-Cell-Group-choice-CM-Rprt,
id-Power-Local-Cell-Group-InformationItem-AuditRsp,
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList-AuditRsp,
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd,
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id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd,
id-Power-Local-Cell-Group-ID.
id-PRACH-Information.
id-PRACHConstant.
id-PRACH-ParametersItem-CTCH-SetupRgstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRgstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRgstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRgstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-Primary-CPICH-Usage-for-Channel-Estimation,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRgstFDD,
id-PrimaryScramblingCode.
id-SCH-Information-Cell-ReconfRgstTDD,
id-SCH-Information-Cell-SetupRgstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRgst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-Timeslot-Format-PSCH-ReconfRgst-LCR,
id-PUSCHConstant.
id-PUSCHSets-AddList-PSCH-ReconfRast,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRgstFDD,
id-RACH-ParameterItem-CTCH-SetupRgstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-ID,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rgst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRgstFDD,
id-RL-informationItem-RL-DeletionRgst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRgstFDD,
id-RL-InformationItem-RL-RestoreInd.
id-RL-InformationItem-RL-SetupRgstFDD,
id-RL-InformationList-RL-AdditionRgstFDD,
id-RL-informationList-RL-DeletionRgst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRgstFDD,
id-RL-InformationList-RL-SetupRgstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
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id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady.
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRgstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd.
id-RL-Specific-DCH-Info,
id-RL-Specific-E-DCH-Info,
id-S-CCPCH-Information,
id-S-CCPCH-InformationListExt-AuditRsp,
id-S-CCPCH-InformationListExt-ResourceStatusInd,
id-S-CCPCH-LCR-InformationListExt-AuditRsp,
id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRgstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRgstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRgstTDD,
id-Secondary-CPICH-Information,
id-SecondaryCPICH-InformationItem-Cell-ReconfRgstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRgstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-Secondary-CPICH-Information-Change,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-Semi-PersistentScheduling-CapabilityLCR,
id-SegmentInformationListIE-SystemInfoUpdate,
id-Serving-Cell-Change-CFN,
id-Serving-E-DCH-RL-ID,
id-SixteenQAM-UL-Capability,
id-SixtyfourQAM-DL-Capability,
id-SixtyfourQAM-DL-MIMO-Combined-Capability,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SignallingBearerRequestIndicator,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-E-DPCCH-Power-Boosting-Capability,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
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id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRgstTDD-PSCH,
id-SyncFrameNumber.
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TargetCommunicationControlPortID,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo.
id-TimingAdvanceApplied.
id-TnlOos.
id-TransmissionDiversityApplied,
id-transportlayeraddress,
id-Tstd-indicator,
id-UARFCNforNt,
id-UARFCNforNd.
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD.
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRgstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRgstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRgstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRgstTDD,
id-UL-DPCH-InformationList-RL-SetupRgstTDD,
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD.
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRgstFDD,
id-UL-DPCH-Information-RL-SetupRgstFDD,
id-UL-DPDCH-Indicator-For-E-DCH-Operation,
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD.
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD.
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD.
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
id-USCH-Information-Add,
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,
id-USCH-RearrangeList-Bearer-RearrangeInd,
```

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id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-DwPCH-LCR-Information
id-DwPCH-LCR-InformationList-AuditRsp.
id-DwPCH-LCR-Information-Cell-SetupRgstTDD,
id-DwPCH-LCR-Information-Cell-ReconfRgstTDD,
id-DwPCH-LCR-Information-ResourceStatusInd,
id-maxFACH-Power-LCR-CTCH-SetupRgstTDD,
id-maxFACH-Power-LCR-CTCH-ReconfRgstTDD,
id-FPACH-LCR-Information,
id-FPACH-LCR-Information-AuditRsp.
id-FPACH-LCR-InformationList-AuditRsp,
id-FPACH-LCR-InformationList-ResourceStatusInd,
id-FPACH-LCR-Parameters-CTCH-SetupRgstTDD,
id-FPACH-LCR-Parameters-CTCH-ReconfRgstTDD.
id-PCCPCH-LCR-Information-Cell-SetupRgstTDD,
id-PCH-Power-LCR-CTCH-SetupRgstTDD,
id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
id-PICH-LCR-Parameters-CTCH-SetupRgstTDD,
id-PRACH-LCR-ParametersList-CTCH-SetupRgstTDD.
id-RL-InformationResponse-LCR-RL-SetupRspTDD
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRgstTDD,
id-TimeSlot,
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-LCR-Cell-SetupRastTDD.
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,
id-TimeSlotLCR-CM-Rgst,
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-DL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD,
id-UL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD,
id-TimeslotISCP-InformationList-LCR-RL-AdditionRgstTDD,
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-LCR-InformationModify-AddList,
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
id-UL-SIRTarget,
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRast,
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRgst,
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRgst,
id-PUSCH-Info-DM-Rast,
id-PUSCH-Info-DM-Rsp.
id-PUSCH-Info-DM-Rort,
id-RL-InformationResponse-LCR-RL-AdditionRspTDD,
id-IPDLParameter-Information-LCR-Cell-SetupRgstTDD,
id-IPDLParameter-Information-LCR-Cell-ReconfRgstTDD,
id-HS-PDSCH-HS-SCCH-E-AGCH-E-RGCH-E-HICH-MaxPower-PSCH-ReconfRqst,
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst,
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id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRast.
id-HS-PDSCH-TDD-Information-PSCH-ReconfRast.
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRgst,
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRgst,
id-SYNCDlCodeId-TransInitLCR-CellSvncInitiationRgstTDD,
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRgstTDD,
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD,
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRgstTDD,
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD,
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD,
id-NSubCyclesPerCyclePeriod-CellSyncReconfRgstTDD,
id-DwPCH-Power.
id-AccumulatedClockupdate-CellSyncReprtTDD,
id-HSDPA-Capability,
id-HSDSCH-FDD-Information,
id-HSDSCH-Common-System-InformationFDD,
id-HSDSCH-Common-System-Information-ResponseFDD,
id-HSDSCH-FDD-Information-Response,
id-HSDSCH-Information-to-Modify,
id-HSDSCH-Information-to-Modify-Unsynchronised,
id-HSDSCH-MACdFlows-to-Add,
id-HSDSCH-MACdFlows-to-Delete,
id-HSDSCH-Paging-System-InformationFDD,
id-HSDSCH-Paging-System-Information-ResponseFDD,
id-HSDSCH-RearrangeList-Bearer-RearrangeInd,
id-HSDSCH-Resources-Information-AuditRsp,
id-HSDSCH-Resources-Information-ResourceStatusInd,
id-HSDSCH-RNTI,
id-HSDSCH-TDD-Information,
id-HSDSCH-TDD-Information-Response,
id-HSPDSCH-RL-ID,
id-HSSICH-Info-DM-Rprt,
id-HSSICH-Info-DM-Rast,
id-HSSICH-Info-DM-Rsp,
id-PrimCCPCH-RSCP-DL-PC-RgstTDD,
id-HSDSCH-FDD-Update-Information,
id-HSDSCH-TDD-Update-Information,
id-UL-Synchronisation-Parameters-LCR,
id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD,
id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD,
id-CCTrCH-Maximum-DL-Power-RL-SetupRgstTDD,
id-CCTrCH-Minimum-DL-Power-RL-SetupRqstTDD,
id-CCTrCH-Maximum-DL-Power-RL-AdditionRgstTDD,
id-CCTrCH-Minimum-DL-Power-RL-AdditionRqstTDD,
id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD,
id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD,
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD,
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD,
id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD,
id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD,
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD,
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id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD,
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRastTDD.
id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRastTDD.
id-TDD-TPC-DownlinkStepSize-RL-AdditionRgstTDD,
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD.
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD,
id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD,
id-TimingAdjustmentValueLCR,
id-PrimaryCCPCH-RSCP-Delta,
id-Maximum-Target-ReceivedTotalWideBandPower,
id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp,
id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp,
id-SynchronisationIndicator,
id-Reference-ReceivedTotalWideBandPower,
id-Reference-ReceivedTotalWideBandPowerReporting,
id-Reference-ReceivedTotalWideBandPowerSupportIndicator,
id-Maximum-Target-ReceivedTotalWideBandPower-LCR,
id-multiple-PUSCH-InfoList-DM-Rsp,
id-multiple-PUSCH-InfoList-DM-Rprt,
id-Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio,
id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp,
id-PCCPCH-768-Information-Cell-SetupRgstTDD,
id-SCH-768-Information-Cell-SetupRgstTDD,
id-SCH-768-Information-Cell-ReconfRgstTDD,
id-PCCPCH-768-Information-Cell-ReconfRgstTDD,
id-P-CCPCH-768-Information-AuditRsp,
id-PICH-768-Information-AuditRsp,
id-PRACH-768-InformationList-AuditRsp,
id-SCH-768-Information-AuditRsp,
id-MICH-768-Information-AuditRsp,
id-CommonPhysicalChannelID768-CommonTrChDeletionReg,
id-MICH-768-Parameters-CTCH-ReconfRqstTDD,
id-PICH-768-Parameters-CTCH-SetupRgstTDD,
id-PICH-768-Parameters-CTCH-ReconfRqstTDD,
id-PRACH-768-Parameters-CTCH-SetupRqstTDD,
id-S-CCPCH-768-InformationList-AuditRsp,
id-S-CCPCH-768-Information-AuditRsp,
id-S-CCPCH-768-Parameters-CTCH-SetupRgstTDD,
id-S-CCPCH-768-Parameters-CTCH-ReconfRgstTDD,
id-S-CCPCH-768-Information-ResourceStatusInd,
id-P-CCPCH-768-Information-ResourceStatusInd,
id-PICH-768-Information-ResourceStatusInd,
id-PRACH-768-InformationList-ResourceStatusInd,
id-SCH-768-Information-ResourceStatusInd,
id-MICH-768-Information-ResourceStatusInd,
id-S-CCPCH-768-InformationList-ResourceStatusInd.
id-PRACH-768-Information,
id-UL-DPCH-768-Information-RL-SetupRgstTDD,
id-DL-DPCH-768-Information-RL-SetupRgstTDD,
id-DL-DPCH-InformationItem-768-RL-AdditionRgstTDD,
id-UL-DPCH-InformationItem-768-RL-AdditionRqstTDD,
id-UL-DPCH-768-InformationAddItemIE-RL-ReconfPrepTDD,
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id-UL-DPCH-768-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-768-InformationModify-AddItem,
id-UL-DPCH-768-InformationModify-AddList.
id-UL-Timeslot768-Information-RL-ReconfPrepTDD,
id-DL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD,
id-DL-DPCH-768-InformationAddList-RL-ReconfPrepTDD,
id-DL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD.
id-DL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD.
id-DL-Timeslot-768-InformationModify-ModifyList-RL-ReconfPrepTDD,
id-DPCH-ID768-DM-Rast,
id-multiple-DedicatedMeasurementValueList-768-TDD-DM-Rsp,
id-DPCH-ID768-DM-Rsp,
id-DPCH-ID768-DM-Rprt,
id-PDSCH-AddInformation-768-PSCH-ReconfRgst,
id-PDSCH-ModifyInformation-768-PSCH-ReconfRqst,
id-PUSCH-AddInformation-768-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-768-PSCH-ReconfRqst,
id-dL-HS-PDSCH-Timeslot-Information-768-PSCH-ReconfRgst,
id-hS-SCCH-Information-768-PSCH-ReconfRgst,
id-hS-SCCH-InformationModify-768-PSCH-ReconfRqst,
id-tFCI-Presence,
id-E-RUCCH-InformationList-AuditRsp,
id-E-RUCCH-InformationList-ResourceStatusInd,
id-E-RUCCH-Information,
id-E-DCH-Information,
id-E-DCH-Information-Response,
id-E-DCH-Information-Reconfig,
id-E-PUCH-Information-PSCH-ReconfRqst,
id-Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst,
id-Modify-E-AGCH-Resource-Pool-PSCH-ReconfRgst,
id-Delete-From-E-AGCH-Resource-Pool-PSCH-ReconfRgst,
id-E-HICH-Information-PSCH-ReconfRqst,
id-E-DCH-TDD-CapacityConsumptionLaw,
id-E-HICH-TimeOffset,
id-Maximum-Generated-ReceivedTotalWideBandPowerInOtherCells.
id-E-DCH-Serving-RL-ID,
id-E-RUCCH-768-InformationList-AuditRsp.
id-E-RUCCH-768-InformationList-ResourceStatusInd,
id-E-RUCCH-768-Information,
id-E-DCH-768-Information,
id-E-DCH-768-Information-Reconfig,
id-E-PUCH-Information-768-PSCH-ReconfRqst,
id-Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst,
id-Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst,
id-E-HICH-Information-768-PSCH-ReconfRgst,
id-RTWP-ReportingIndicator,
id-RTWP-CellPortion-ReportingIndicator,
id-Received-Scheduled-EDCH-Power-Share-Value,
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value.
id-Received-Scheduled-EDCH-Power-Share,
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion,
id-ueCapability-Info,
id-MAChs-ResetIndicator,
id-SYNC-UL-Partition-LCR,
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id-E-DCH-LCR-Information,
id-E-DCH-LCR-Information-Reconfig.
id-E-PUCH-Information-LCR-PSCH-ReconfRast.
id-Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRgst,
id-Modify-E-AGCH-Resource-Pool-LCR-PSCH-Reconfrast.
id-Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRgst,
id-Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRast,
id-Delete-From-E-HICH-Resource-Pool-PSCH-ReconfRast,
id-E-HICH-TimeOffsetLCR,
id-HSDSCH-MACdPDU-SizeCapability,
id-ModulationPO-MBSFN,
id-Secondary-CCPCH-SlotFormat-Extended,
id-MBSFN-Only-Mode-Indicator-Cell-SetupRgstTDD-LCR,
id-Time-Slot-Parameter-ID.
id-MBSFN-Only-Mode-Capability,
id-MBSFN-Cell-ParameterID-Cell-SetupRgstTDD,
id-MBSFN-Cell-ParameterID-Cell-ReconfRgstTDD,
id-S-CCPCH-Modulation,
id-TimeSlotConfigurationList-LCR-CTCH-SetupRgstTDD,
id-Cell-Frequency-List-Information-LCR-MulFreq-AuditRsp,
id-Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp,
id-Cell-Frequency-List-LCR-MulFreq-Cell-SetupRqstTDD,
id-UARFCN-Adjustment,
id-Cell-Frequency-List-Information-LCR-MulFreq-ResourceStatusInd.
id-Cell-Frequency-List-InformationItem-LCR-MulFreq-ResourceStatusInd,
id-UPPCHPositionLCR.
id-UPPCH-LCR-Parameters-CTCH-ReconfRgstTDD,
id-UPPCH-LCR-InformationList-AuditRsp,
id-UPPCH-LCR-InformationItem-AuditRsp,
id-UPPCH-LCR-InformationList-ResourceStatusInd,
id-UPPCH-LCR-InformationItem-ResourceStatusInd,
id-multipleFreq-dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst,
id-multipleFreq-HS-DSCH-Resources-InformationList-AuditRsp,
id-multipleFreq-HS-DSCH-Resources-InformationList-ResourceStatusInd,
id-UARFCNSpecificCauseList.id-Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD.
id-MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst,
id-Extended-HS-SCCH-ID.
id-Extended-HS-SICH-ID,
id-HSSICH-InfoExt-DM-Rgst,
id-Delete-From-HS-SCCH-Resource-PoolExt-PSCH-ReconfRqst,
id-HS-SCCH-InformationExt-LCR-PSCH-ReconfRgst,
id-HS-SCCH-InformationModifyExt-LCR-PSCH-ReconfRqst,
id-PowerControlGAP.
id-PowerControlGAP-For-CellFACHLCR,
id-IdleIntervalInformation.
id-MBSFN-SpecialTimeSlot-LCR,
id-MultipleFreg-E-DCH-Resources-InformationList-AuditRsp.
id-MultipleFreq-E-DCH-Resources-InformationList-ResourceStatusInd,
id-MultipleFreq-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRqst,
id-MultipleFreg-E-PUCH-Timeslot-Information-LCRItem-PSCH-ReconfRgst,
id-Extended-E-HICH-ID-TDD,
id-E-DCH-MACdPDU-SizeCapability,
id-E-HICH-TimeOffset-Extension,
id-MultipleFreq-E-HICH-TimeOffsetLCR,
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713

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id-PLCCH-parameters,
id-E-RUCCH-parameters,
id-E-RUCCH-768-parameters.
id-HS-Cause.
id-E-Cause.
id-AdditionalTimeSlotListLCR,
id-AdditionalMeasurementValueList,
id-HSDSCH-Paging-System-InformationLCR,
id-HSDSCH-Paging-System-Information-ResponseLCR,
id-HSDSCH-Common-System-InformationLCR,
id-HSDSCH-Common-System-Information-ResponseLCR,
id-Paging-MACFlows-to-DeleteLCR,
id-Enhanced-UE-DRX-CapabilityLCR,
id-Enhanced-UE-DRX-InformationLCR.
id-Common-EDCH-MACdFlows-to-DeleteLCR,
id-Common-EDCH-System-InformationLCR,
id-Common-EDCH-System-Information-ResponseLCR,
id-Common-MACFlows-to-DeleteLCR,
id-Common-UL-MACFlows-to-DeleteLCR,
id-HSDSCH-PreconfigurationSetup,
id-HSDSCH-PreconfigurationInfo,
id-NoOfTargetCellHS-SCCH-Order,
id-EnhancedHSServingCC-Abort,
id-GANSS-Time-ID,
id-Additional-HS-Cell-Information-RL-Setup,
id-Additional-HS-Cell-Information-Response,
id-Additional-HS-Cell-Information-RL-Addition,
id-Additional-HS-Cell-Change-Information-Response,
id-Additional-HS-Cell-Information-RL-Reconf-Prep,
id-Additional-HS-Cell-Information-RL-Reconf-Reg,
id-Additional-HS-Cell-Information-RL-Param-Upd,
id-Multi-Cell-Capability-Info,
id-MinimumReducedE-DPDCH-GainFactor,
id-IMB-Parameters,
id-E-RNTI,
id-E-DCH-Semi-PersistentScheduling-Information-LCR,
id-HS-DSCH-Semi-PersistentScheduling-Information-LCR,
id-Add-To-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst,
id-Modify-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst,
id-Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst,
id-Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst-Ext,
id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR,
id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR,
id-HSSICH-ReferenceSignal-InformationLCR,
id-UE-Selected-MBMS-Service-Information,
id-HSSICH-ReferenceSignal-InformationModifyLCR,
id-TimeSlotMeasurementValueListLCR,
id-MIMO-Power-Offset-For-S-CPICH-Capability,
id-MIMO-PilotConfigurationExtension,
id-TxDiversityOnDLControlChannelsByMIMOUECapability,
id-Cell-Capability-Container,
id-E-HICH-TimeOffset-ReconfFailureTDD,
id-Common-System-Information-ResponseLCR,
id-HSSCCH-TPC-StepSize,
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id-Out-of-Sychronization-Window,
id-PrecodingWeightSetRestriction,
id-HSDSCH-RNTI-For-FACH,
id-E-RNTI-For-FACH,
id-Treset-Usage-Indicator,
id-Non-Serving-RL-Preconfig-Info,
id-Non-Serving-RL-Preconfig-Setup,
id-Non-Serving-RL-Preconfig-Removal,
maxNrOfCCTrCHs,
maxNrOfCellSyncBursts,
maxNrOfCodes,
maxNrOfDCHs,
maxNrOfDLTSs,
maxNrOfDLTSLCRs,
maxNrOfDPCHs,
maxNrOfDPCHsPerRL-1,
maxNrOfDPCHLCRs,
maxNrOfDPCHsLCRPerRL-1,
maxNrOfDPCHs768,
maxNrOfDPCHs768PerRL-1,
maxNrOfDSCHs,
maxNrOfFACHs,
maxNrOfRLs,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfRLSets,
maxNrOfPDSCHs,
maxNrOfPUSCHs,
maxNrOfPUSCHs-1,
maxNrOfPRACHLCRs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,
maxNrOfReceptsPerSyncFrame,
maxNrOfSCCPCHs,
maxNrOfSCCPCHsinExt,
maxNrOfSCCPCHLCRs,
maxNrOfSCCPCHsLCRinExt,
maxNrOfSCCPCHs768,
maxNrOfULTSs,
maxNrOfULTSLCRs,
maxNrOfUSCHs,
maxFACHCell,
maxFPACHCell.
maxRACHCell,
maxPLCCHCell,
maxPRACHCell,
maxSCCPCHCell,
maxSCCPCHCell768,
maxSCCPCHCellinExt,
maxSCCPCHCellinExtLCR,
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
```

```
maxCommunicationContext,
   maxLocalCellinNodeB.
   maxNrOfSlotFormatsPRACH,
   maxIB,
   maxIBSEG,
   maxNrOfCellPortionsPerCell,
   maxNrOfHSSCCHs.
   maxNrOfHSSICHs,
   maxNrOfHSSICHs-1,
   maxNrOfHSPDSCHs.
   maxNrOfHSPDSCHs768
   maxNrOfSyncFramesLCR,
   maxNrOfReceptionsperSyncFrameLCR,
   maxNrOfSyncDLCodesLCR,
   maxNrOfMACdFlows,
   maxNrOfEDCHMACdFlows,
   maxE-RUCCHCell,
   maxNrOfE-PUCHSlots,
   maxNrOfEAGCHs,
   maxNrOfEAGCHCodes,
   maxNrOfE-PUCHSlotsLCR,
   maxNrOfEPUCHcodes,
   maxNrOfEHICHs,
   maxFrequencyinCell,
   maxFrequencyinCell-1,
   maxNrOfHSSCCHsinExt,
   maxNrOfHSSCCHsLCR,
   maxNrOfEAGCHsLCR,
   maxNrOfEHICHsLCR,
   maxNrOfHSDSCH-1
FROM NBAP-Constants;
  *******************
-- COMMON TRANSPORT CHANNEL SETUP REQUEST FDD
  *******************
CommonTransportChannelSetupRequestFDD ::= SEQUENCE {
                          ProtocolIE-Container
                                                          {CommonTransportChannelSetupRequestFDD-IEs}},
   protocolIEs
   protocolExtensions
                          ProtocolExtensionContainer
                                                          {{CommonTransportChannelSetupRequestFDD-Extensions}}
                                                                                                              OPTIONAL,
CommonTransportChannelSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonTransportChannelSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::=
    { ID
           id-C-ID
                                                                                            C-ID
                                                                                                                                 PRESENCE
                                                             CRITICALITY reject
                                                                                    TYPE
mandatory
    { ID
           id-ConfigurationGenerationID
                                                             CRITICALITY reject
                                                                                    TYPE
                                                                                            ConfigurationGenerationID
                                                                                                                                 PRESENCE
mandatory
```

```
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD
                                                                CRITICALITY ignore
                                                                                        TYPE
                                                                                                 CommonPhysicalChannelType-CTCH-SetupRqstFDD
    PRESENCE
                mandatory },
    . . .
CommonPhysicalChannelType-CTCH-SetupRgstFDD ::= CHOICE {
    secondary-CCPCH-parameters
                                    Secondary-CCPCH-CTCH-SetupRqstFDD,
    pRACH-parameters
                                    PRACH-CTCH-SetupRqstFDD,
    notUsed-pCPCHes-parameters
                                    NULL,
Secondary-CCPCH-CTCH-SetupRgstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    fdd-S-CCPCH-Offset
                                            FDD-S-CCPCH-Offset,
    dl-ScramblingCode
                                            DL-ScramblingCode
                                                                                                                                OPTIONAL,
    -- This IE shall be present if the PCH Parameters IE is not present
    fdd-DL-ChannelisationCodeNumber
                                            FDD-DL-ChannelisationCodeNumber,
    secondary-CCPCH-SlotFormat
                                            SecondaryCCPCH-SlotFormat,
    tFCI-Presence
                                            TFCI-Presence
                                                                                                                                OPTIONAL,
    -- This IE shall be present if the Secondary CCPCH Slot Format is set to any of the values from 8 to 17 or if 3.84Mcps TDD IMB is used
    multiplexingPosition
                                            MultiplexingPosition,
    powerOffsetInformation
                                            PowerOffsetInformation-CTCH-SetupRgstFDD,
    sTTD-Indicator
                                            STTD-Indicator,
    fACH-Parameters
                                            FACH-ParametersList-CTCH-SetupRqstFDD
                                                                                                                                OPTIONAL,
                                            PCH-Parameters-CTCH-SetupRqstFDD
                                                                                                                                OPTIONAL,
    pCH-Parameters
    iE-Extensions
                                            ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-SetupRgstFDD-ExtIEs} }
                                                                                                                                OPTIONAL,
Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-MICH-Parameters-CTCH-SetupRqstFDD
                                                        CRITICALITY reject EXTENSION MICH-Parameters-CTCH-SetupRqstFDD
                                                                                                                                PRESENCE optional
     ID id-FDD-S-CCPCH-FrameOffset-CTCH-SetupRgstFDD
                                                        CRITICALITY reject EXTENSION FDD-S-CCPCH-FrameOffset
    PRESENCE optional }
    { ID id-ModulationPO-MBSFN
                                                        CRITICALITY reject EXTENSION ModulationPO-MBSFN
    PRESENCE optional }
    { ID id-Secondary-CCPCH-SlotFormat-Extended
                                                        CRITICALITY reject EXTENSION Secondary-CCPCH-SlotFormat-Extended
                                                                                                                                        PRESENCE
optional
    { ID id-IMB-Parameters
                                                        CRITICALITY reject EXTENSION IMB-Parameters
                                                                                                                                        PRESENCE
optional },
PowerOffsetInformation-CTCH-SetupRqstFDD ::= SEQUENCE {
    pO1-ForTFCI-Bits
                                            PowerOffset,
    pO3-ForPilotBits
                                            PowerOffset,
   iE-Extensions
                                            ProtocolExtensionContainer { { PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs} } OPTIONAL,
    . . .
PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
FACH-ParametersList-CTCH-SetupRgstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRgstFDD }}
FACH-ParametersListIEs-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
   TYPE FACH-ParametersListIE-CTCH-SetupRqstFDD
                                                                                                                PRESENCE mandatory }
FACH-ParametersListIE-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstFDD
FACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
                                   CommonTransportChannelID,
   commonTransportChannelID
   transportFormatSet
                                   TransportFormatSet,
   toAWS
                                   TOAWS.
                                   TOAWE,
   t.oAWE
   maxFACH-Power
                                   DL-Power,
                                   iE-Extensions
                                                                                                                OPTIONAL,
FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-bindingID
                                          CRITICALITY ignore
                                                                          BindingID
                                                                                                         PRESENCE optional
                                                               EXTENSION
          id-transportlayeraddress
                                          CRITICALITY ignore
                                                                                                         PRESENCE optional
     ID
                                                               EXTENSION
                                                                         TransportLayerAddress
          id-TnlQos
                                          CRITICALITY ignore
                                                                          Tnl0os
                                                                                                         PRESENCE optional
     ID
                                                               EXTENSION
          id-BroadcastReference
                                                                          BroadcastReference
     TD
                                          CRITICALITY ignore
                                                               EXTENSION
   PRESENCE optional }|
   { ID
          id-IPMulticastIndication
                                          CRITICALITY ignore
                                                                         IPMulticastIndication
                                                                                                          PRESENCE optional
                                                               EXTENSION
   . . .
PCH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstFDD }}
PCH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    PCH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonTransportChannelID
                                   CommonTransportChannelID,
   transportFormatSet
                                   TransportFormatSet,
   toAWS
                                   ToAWS,
   toAWE
                                   ToAWE,
   pCH-Power
                                   DL-Power.
                                   PICH-Parameters-CTCH-SetupRqstFDD,
   pICH-Parameters
                                   ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                OPTIONAL,
   . . .
PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
     ID
          id-bindingID
                                          CRITICALITY ignore
                                                                          BindingID
                                                                                                      PRESENCE optional
                                                               EXTENSION
          id-transportlayeraddress
                                          CRITICALITY ignore
                                                                                                      PRESENCE optional
     ID
                                                               EXTENSION
                                                                          TransportLayerAddress
          id-TnlOos
                                          CRITICALITY ignore
                                                                                                      PRESENCE optional
     ID
                                                               EXTENSION
                                                                         Tnl0os
    . . .
```

```
PICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                              CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber
                                              FDD-DL-ChannelisationCodeNumber.
   pICH-Power
                                              PICH-Power.
   pICH-Mode
                                              PICH-Mode,
   sTTD-Indicator
                                              STTD-Indicator,
                                              ProtocolExtensionContainer { { PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                                   OPTIONAL.
PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-Parameters-CTCH-SetupRgstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                              CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber
                                              FDD-DL-ChannelisationCodeNumber,
   mICH-Power
                                              PICH-Power,
   mICH-Mode
                                              MICH-Mode,
                                              STTD-Indicator,
   sTTD-Indicator
   iE-Extensions
                                              ProtocolExtensionContainer { { MICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
                                                                                                                                   OPTIONAL.
    . . .
MICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRACH-CTCH-SetupRgstFDD ::= SEQUENCE
    commonPhysicalChannelID
                                     CommonPhysicalChannelID,
    scramblingCodeNumber
                                     ScramblingCodeNumber,
    tFCS
                                     TFCS,
   preambleSignatures
                                     PreambleSignatures,
   allowedSlotFormatInformation
                                     AllowedSlotFormatInformationList-CTCH-SetupRqstFDD,
    rACH-SubChannelNumbers
                                     RACH-SubChannelNumbers.
   ul-punctureLimit
                                     PunctureLimit,
   preambleThreshold
                                     PreambleThreshold,
                                     RACH-Parameters-CTCH-SetupRqstFDD,
    rACH-Parameters
                                     AICH-Parameters-CTCH-SetupRqstFDD,
    aICH-Parameters
                                     ProtocolExtensionContainer { { PRACHItem-CTCH-SetupRqstFDD-ExtIEs} } 
   iE-Extensions
                                                                                                                   OPTIONAL,
    . . .
PRACHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
AllowedSlotFormatInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-
SetupRqstFDD
AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   rACHSlotFormat
                       RACH-SlotFormat,
   iE-Extensions
                       OPTIONAL,
    . . .
```

```
AllowedSlotFormatInformationItem-CTCH-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RACH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ RACH-ParametersIE-CTCH-SetupRqstFDD }}
RACH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    RACH-ParametersItem-CTCH-SetupRgstFDD ::= SEQUENCE {
   commonTransportChannelID
                                           CommonTransportChannelID,
   transportFormatSet
                                           TransportFormatSet,
   iE-Extensions
                                           ProtocolExtensionContainer { RACH-ParametersItem-CTCH-SetupRgstFDD-ExtIEs} }
                                                                                                                           OPTIONAL,
RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     TD
          id-bindingID
                                           CRITICALITY ignore
                                                                 EXTENSION
                                                                            BindingID
                                                                                                          PRESENCE optional
     ID
          id-transportlayeraddress
                                           CRITICALITY ignore
                                                                 EXTENSION
                                                                            TransportLayerAddress
                                                                                                          PRESENCE optional
     ID
          id-TnlQos
                                           CRITICALITY ignore
                                                                 EXTENSION
                                                                            TnlQos
                                                                                                          PRESENCE optional
    . . .
AICH-Parameters-CTCH-SetupRgstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                           CommonPhysicalChannelID,
   aICH-TransmissionTiming
                                           AICH-TransmissionTiming,
   fdd-dl-ChannelisationCodeNumber
                                           FDD-DL-ChannelisationCodeNumber,
   aICH-Power
                                           AICH-Power,
   sTTD-Indicator
                                           STTD-Indicator,
   iE-Extensions
                                           ProtocolExtensionContainer { { AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
                                                                                                                           OPTIONAL,
AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
      ********************
CommonTransportChannelSetupRequestTDD ::= SEQUENCE
   protocolIEs
                        ProtocolIE-Container
                                                   {{CommonTransportChannelSetupRequestTDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer
                                                  {{CommonTransportChannelSetupRequestTDD-Extensions}}
                                                                                                             OPTIONAL,
   . . .
CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
```

```
id-C-TD
    ID
                                                   CRITICALITY reject TYPE C-ID
                                                                                                              PRESENCE mandatory
     ID
          id-ConfigurationGenerationID
                                                   CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                              PRESENCE mandatory
          PRESENCE
             mandatory },
CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonPhysicalChannelType-CTCH-SetupRqstTDD ::= CHOICE {
   secondary-CCPCH-parameters
                                         Secondary-CCPCH-CTCH-SetupRgstTDD,
   pRACH-parameters
                                         PRACH-CTCH-SetupRgstTDD,
   extension-CommonPhysicalChannelType-CTCH-SetupRgstTDD Extension-CommonPhysicalChannelType-CTCH-SetupRgstTDD
Extension-CommonPhysicalChannelType-CTCH-SetupRgstTDD ::= ProtocolIE-Single-Container {{ Extension-CommonPhysicalChannelType-CTCH-SetupRgstTDDIE }}
Extension-CommonPhysicalChannelType-CTCH-SetupRqstTDDIE NBAP-PROTOCOL-IES ::= {
    ID id-PLCCH-parameters
                         CRITICALITY ignore TYPE PLCCH-parameters
                                                                        PRESENCE mandatory }
                              CRITICALITY ignore TYPE E-RUCCH-parameters
    ID id-E-RUCCH-parameters
                                                                        PRESENCE mandatory }
  Secondary-CCPCH-CTCH-SetupRgstTDD ::= SEQUENCE {
   sccpch-cctrch-ID
                                         CCTrCH-ID, -- For DL CCTrCH supporting one or several Secondary CCPCHs
   t FCS
                                                   -- For DL CCTrCH supporting one or several Secondary CCPCHs
   tFCI-Coding
                                         TFCI-Coding
   punctureLimit
                                         PunctureLimit,
                                         Secondary-CCPCH-parameterList-CTCH-SetupRgstTDD,
   secondaryCCPCH-parameterList
                                         FACH-ParametersList-CTCH-SetupRgstTDD
   fACH-ParametersList
                                                                               OPTIONAL,
   pCH-Parameters
                                         PCH-Parameters-CTCH-SetupRgstTDD
                                                                               OPTIONAL,
                                         ProtocolExtensionContainer {{Secondary-CCPCHItem-CTCH-SetupRgstTDD-ExtIEs}}
   iE-Extensions
                                                                                                                    OPTIONAL,
Secondary-CCPCHItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Tstd-indicator
                                                   CRITICALITY reject EXTENSION TSTD-Indicator
                                                                                                                    PRESENCE
optional }|
   { ID id-MICH-Parameters-CTCH-SetupRgstTDD
                                                   CRITICALITY reject EXTENSION MICH-Parameters-CTCH-SetupRgstTDD
                                                                                                                    PRESENCE
optional }|
   { ID id-Additional-S-CCPCH-Parameters-CTCH-SetupRgstTDD CRITICALITY reject EXTENSION Secondary-CCPCH-parameterExtendedList-CTCH-SetupRgstTDD
      PRESENCE optional }|
   -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be established.
   { ID id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRgstTDD CRITICALITY reject EXTENSION Secondary-CCPCH-LCR-parameterExtendedList-CTCH-
                 PRESENCE optional }|
SetupRastTDD
   -- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHLCRs SCCPCHs are to be established.
   PRESENCE optional }
```

```
{ ID id-S-CCPCH-Modulation
                                                            CRITICALITY reject EXTENSION ModulationMBSFN
            PRESENCE optional } -- Applicable to 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    { ID id-TimeSlotConfigurationList-LCR-CTCH-SetupRgstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-CTCH-SetupRgstTDD
    PRESENCE optional } |
    { ID id-UARFCNforNt
                            CRITICALITY reject EXTENSION UARFON
                                                                        PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies. This IE indicates the frequency of Secondary Frequency on which SCCPCH to be set
Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD }}
Secondary-CCPCH-parameterListIEs-CTCH-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
     ID id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD
    PRESENCE optional }
    { ID id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRgstTDD CRITICALITY reject TYPE Secondary-CCPCH-LCR-parameterList-CTCH-SetupRgstTDD
    PRESENCE optional }
Secondary-CCPCH-parameterListIE-CTCH-SetupRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-parameterItem-CTCH-SetupRgstTDD
Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
                                                CommonPhysicalChannelID,
    commonPhysicalChannelID
    tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
    timeslot
                                                TimeSlot,
    midambleShiftandBurstType
                                                MidambleShiftAndBurstType,
    tdd-PhysicalChannelOffset
                                                TDD-PhysicalChannelOffset,
    repetitionPeriod
                                                RepetitionPeriod,
    repetitionLength
                                                RepetitionLength,
    s-CCPCH-Power
                                                DL-Power,
    iE-Extensions
                                                ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-CTCH-SetupRgstTDD-ExtIEs} }
    OPTIONAL,
    . . .
Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-tFCI-Presence
                                                CRITICALITY notify EXTENSION TFCI-Presence
                                                                                                PRESENCE optional }.
Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHLCRs)) OF Secondary-CCPCH-LCR-parameterItem-CTCH-
SetupRastTDD
Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                                CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR
                                                TDD-ChannelisationCodeLCR,
    timeslotLCR
                                                TimeSlotLCR.
    midambleShiftLCR
                                                MidambleShiftLCR,
    -- For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, NodeB shall ignore the contents of this IE.
    tdd-PhysicalChannelOffset
                                                TDD-PhysicalChannelOffset,
    repetitionPeriod
                                                RepetitionPeriod,
    repetitionLength
                                                RepetitionLength,
    s-CCPCH-Power
                                                DL-Power,
                                                TDD-DL-DPCH-TimeSlotFormat-LCR,
    s-CCPCH-TimeSlotFormat-LCR
```

```
ProtocolExtensionContainer { { Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL.
Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
         id-MBSFN-SpecialTimeSlot-LCR
                                               CRITICALITY ignore
                                                                     EXTENSION TimeslotLCR-Extension
                                                                                                                    PRESENCE optional },
   -- Only for 1.28 Mcps TDD MBSFN only mode, this IE indicates the MBSFN Special Time Slot [19]. The IE 'Time Slot LCR' shall be ignored if this
IE appears
   . . .
Secondary-CCPCH-768-parameterList-CTCH-SetupRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs768)) OF Secondary-CCPCH-768-parameterItem-CTCH-
SetupRastTDD
Secondary-CCPCH-768-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID768
                                           CommonPhysicalChannelID768,
   tdd-ChannelisationCode768
                                           TDD-ChannelisationCode768,
   timeslot
                                           TimeSlot,
   tFCI-Presence768
                                           TFCI-Presence
                                                              OPTIONAL.
   midambleShiftandBurstType768
                                           MidambleShiftAndBurstType768,
   tdd-PhysicalChannelOffset
                                           TDD-PhysicalChannelOffset,
   repetitionPeriod
                                           RepetitionPeriod,
   repetitionLength
                                           RepetitionLength,
   s-CCPCH-Power
                                           DL-Power,
   iE-Extensions
                                           ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-768-CTCH-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
Secondary-CCPCH-parameterItem-768-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FACH-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstTDD }}
FACH-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
     PRESENCE mandatory }
FACH-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstTDD
FACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
   commonTransportChannelID
                                        CommonTransportChannelID,
   fACH-CCTrCH-ID
                                        CCTrCH-ID,
   dl-TransportFormatSet
                                        TransportFormatSet,
   toAWS
                                        ToAWS.
   toAWE
   iE-Extensions
                                        OPTIONAL,
   . . .
FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-maxFACH-Power-LCR-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION DL-Power
                                                                                                          PRESENCE optional
```

```
-- Applicable to 1.28Mcps TDD only
   { ID id-bindingID
                                              CRITICALITY ignore EXTENSION BindingID
                                                                                                        PRESENCE optional
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                              CRITICALITY ignore EXTENSION TransportLayerAddress
                                                                                                        PRESENCE optional
   -- Shall be ignored if bearer establishment with ALCAP.
          id-TnlOos
                                                                                                        PRESENCE optional } |
   { ID
                                              CRITICALITY ignore EXTENSION
                                                                           TnlOos
   -- Shall be ignored if bearer establishment with ALCAP.
          id-BroadcastReference
                                              CRITICALITY ignore EXTENSION
                                                                           BroadcastReference
                                                                                                        PRESENCE
                                                                                                                  optional
   ( TD
          id-TPMulticastIndication
                                              CRITICALITY ignore EXTENSION
                                                                           IPMulticastIndication
                                                                                                        PRESENCE
                                                                                                                  optional
   . . .
PCH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstTDD }}
PCH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    ID id-PCH-ParametersItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE PCH-ParametersItem-CTCH-SetupRqstTDD PRESENCE mandatory }
PCH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE
   commonTransportChannelID
                                       CommonTransportChannelID,
   pCH-CCTrCH-ID
                                       CCTrCH-ID,
   dl-TransportFormatSet
                                       TransportFormatSet, -- For the DL.
   toAWS
                                       ToAWS,
   toAWE
                                       TOAWE,
   pICH-Parameters
                                       PICH-Parameters-CTCH-SetupRqstTDD,
   iE-Extensions
                                       ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
                                                                                                                         OPTIONAL.
PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-PCH-Power-LCR-CTCH-SetupRgstTDD
                                               CRITICALITY reject
                                                                  EXTENSION DL-Power
                                                                                                                  PRESENCE optional
     ID id-bindingID
                                               CRITICALITY ignore
                                                                  EXTENSION BindingID
                                                                                                                  PRESENCE optional
   -- Shall be ignored if bearer establishment with ALCAP.
     ID id-transportlayeraddress
                                               CRITICALITY ignore EXTENSION TransportLayerAddress
                                                                                                                  PRESENCE optional
   -- Shall be ignored if bearer establishment with ALCAP.
     ID id-PICH-768-Parameters-CTCH-SetupRqstTDD
                                               CRITICALITY reject
                                                                  EXTENSION PICH-768-ParametersItem-CTCH-SetupRqstTDD
                                                                                                                  PRESENCE optional
     ID id-TnlOos
                                               CRITICALITY ignore
                                                                  EXTENSION TnlOos
                                                                                                                  PRESENCE optional
   -- Shall be ignored if bearer establishment with ALCAP.
PICH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-SetupRqstTDD }}
PICH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
     }
PICH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
```

724

```
commonPhysicalChannelID
                                             CommonPhysicalChannelID,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
    timeSlot
                                            TimeSlot.
    midambleshiftAndBurstType
                                            MidambleShiftAndBurstType,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    pagingIndicatorLength
                                             PagingIndicatorLength,
    pICH-Power
                                             PICH-Power,
                                            ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
PICH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PICH-LCR-Parameters-CTCH-SetupRqstTDD ::= SEQUENCE
    commonPhysicalChannelID
                                             CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    pagingIndicatorLength
                                             PagingIndicatorLength,
    pICH-Power
                                            PICH-Power,
    second-TDD-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    iE-Extensions
                                            ProtocolExtensionContainer { { PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
                                                                                                                                          OPTIONAL,
PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
           id-Tstd-indicator
                                        CRITICALITY reject
                                                                 EXTENSION TSTD-Indicator
                                                                                                  PRESENCE
                                                                                                                      optional
    -- Applicable to 1.28 Mcps TDD only
    . . .
PICH-768-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                             CommonPhysicalChannelID768,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768,
    timeSlot
                                            TimeSlot.
    midambleshiftAndBurstType78
                                            MidambleShiftAndBurstType768,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    repetitionPeriod
                                            RepetitionPeriod,
                                            RepetitionLength,
    repetitionLength
    pagingIndicatorLength
                                            PagingIndicatorLength,
    pICH-Power
                                            PICH-Power,
    iE-Extensions
                                            ProtocolExtensionContainer { { PICH-768-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
                                                                                                                                          OPTIONAL,
    . . .
PICH-768-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
MICH-Parameters-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                          CommonPhysicalChannelID,
    tdd-PhysicalChannelOffset
                                          TDD-PhysicalChannelOffset,
    repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength,
   notificationIndicatorLength
                                          NotificationIndicatorLength,
   mICH-Power
                                          PICH-Power,
   mICH-TDDOption-Specific-Parameters
                                          MICH-TDDOption-Specific-Parameters-CTCH-SetupRqstTDD,
                                          ProtocolExtensionContainer { { MICH-Parameters-CTCH-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                            OPTIONAL,
    . . .
MICH-Parameters-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-TDDOption-Specific-Parameters-CTCH-SetupRqstTDD ::= CHOICE {
   hCR-TDD
                                          MICH-HCR-Parameters-CTCH-SetupRqstTDD,
   1CR-TDD
                                          MICH-LCR-Parameters-CTCH-SetupRqstTDD,
    . . . ,
    cHipRate768-TDD
                                          MICH-768-Parameters-CTCH-SetupRgstTDD
MICH-HCR-Parameters-CTCH-SetupRgstTDD ::= SEQUENCE {
    tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
    timeSlot
                                          TimeSlot,
   midambleshiftAndBurstType
                                          MidambleShiftAndBurstType,
   iE-Extensions
                                          ProtocolExtensionContainer { { MICH-HCR-Parameters-CTCH-SetupRgstTDD-ExtIEs } }
                                                                                                                                   OPTIONAL,
MICH-HCR-Parameters-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-LCR-Parameters-CTCH-SetupRqstTDD ::= SEQUENCE {
   tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR,
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
    -- For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, NodeB shall ignore the contents of this IE.
                                          TDD-ChannelisationCodeLCR,
    second-TDD-ChannelisationCodeLCR
    tSTD-Indicator
                                          TSTD-Indicator,
                                          iE-Extensions
                                                                                                                                   OPTIONAL,
MICH-LCR-Parameters-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MBSFN-SpecialTimeSlot-LCR
                                                                          EXTENSION TimeslotLCR-Extension
                                                  CRITICALITY ignore
                                                                                                                            PRESENCE optional },
    -- Only for 1.28 Mcps TDD MBSFN only mode, this IE indicates the MBSFN Special Time Slot [19]. The IE 'Time Slot LCR' shall be ignored if this
IE appears
    . . .
```

```
MICH-768-Parameters-CTCH-SetupRgstTDD ::= SEQUENCE {
                                    TDD-ChannelisationCode768.
   tdd-ChannelisationCode768
                                    TimeSlot.
                                    MidambleShiftAndBurstType768,
   midambleshiftAndBurstType768
                                     iE-Extensions
                                                                                                                 OPTIONAL.
MICH-768-Parameters-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-LCR-CTCH-SetupRgstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-CTCH-SetupRgstTDD
TimeSlotConfigurationItem-LCR-CTCH-SetupRgstTDD ::= SEQUENCE {
   timeslotLCR
                                    TimeSlotLCR,
   timeslotLCR-Parameter-ID
                                     CellParameterID,
   iE-Extensions
                                     OPTIONAL,
   . . .
TimeSlotConfigurationItem-LCR-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-parameterExtendedList-CTCH-SetupRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsinExt)) OF Secondary-CCPCH-parameterItem-CTCH-
SetupRastTDD
   -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be established.
Secondary-CCPCH-LCR-parameterExtendedList-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsLCRinExt)) OF Secondary-CCPCH-LCR-parameterItem-
CTCH-SetupRqstTDD
   -- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHLCRs SCCPCHs are to be established.
PRACH-CTCH-SetupRqstTDD ::= SEQUENCE {
   pRACH-Parameters-CTCH-SetupRgstTDD
                                        PRACH-Parameters-CTCH-SetupRgstTDD,
   iE-Extensions
                                        OPTIONAL,
   . . .
PRACH-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     PRESENCE optional
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    ID id-PRACH-768-Parameters-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION PRACH-768-ParametersItem-CTCH-SetupRqstTDD
                                                                                                           PRESENCE optional
   . . .
PRACH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersIE-CTCH-SetupRqstTDD }}
PRACH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
```

```
ID id-PRACH-ParametersItem-CTCH-SetupRqstTDD
                                                        CRITICALITY reject TYPE PRACH-ParametersItem-CTCH-SetupRqstTDD
                                                                                                                                PRESENCE optional } |
     ID id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD CRITICALITY reject TYPE PRACH-LCR-ParametersList-CTCH-SetupRqstTDD
                                                                                                                                PRESENCE optional }
PRACH-ParametersItem-CTCH-SetupRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                                CommonPhysicalChannelID,
    tFCS
                                                TFCS.
    timeslot
                                                TimeSlot,
    tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
    maxPRACH-MidambleShifts
                                                MaxPRACH-MidambleShifts,
    pRACH-Midamble
                                                PRACH-Midamble,
    rACH
                                                RACH-Parameter-CTCH-SetupRgstTDD,
    iE-Extensions
                                                ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
    OPTIONAL,
PRACH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RACH-Parameter-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ RACH-ParameterIE-CTCH-SetupRqstTDD }}
RACH-ParameterIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
     ID id-RACH-ParameterItem-CTCH-SetupRqstTDD CRITICALITY reject TYPE RACH-ParameterItem-CTCH-SetupRqstTDD PRESENCE mandatory }
RACH-ParameterItem-CTCH-SetupRgstTDD ::= SEQUENCE {
    commonTransportChannelID
                                                CommonTransportChannelID,
    uL-TransportFormatSet
                                                TransportFormatSet, -- For the UL
    iE-Extensions
                                                ProtocolExtensionContainer { { RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs} }
                                                                                                                                        OPTIONAL,
    . . .
RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID
                                        CRITICALITY ignore EXTENSION BindingID
                                                                                                PRESENCE optional }
        -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-transportlayeraddress
                                        CRITICALITY ignore EXTENSION TransportLayerAddress
                                                                                                PRESENCE optional } |
        -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlOos
                                        CRITICALITY ignore EXTENSION TnlQos
                                                                                                PRESENCE optional },
    -- Shall be ignored if bearer establishment with ALCAP.
    . . .
PRACH-LCR-ParametersList-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfPRACHLCRs)) OF PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD
PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                                CommonPhysicalChannelID,
    tFCS
                                                TFCS,
    timeslotLCR
                                                TimeSlotLCR,
    tdd-ChannelisationCodeLCR
                                                TDD-ChannelisationCodeLCR,
    midambleShiftLCR
                                                MidambleShiftLCR,
    rACH
                                                RACH-Parameter-CTCH-SetupRqstTDD,
```

```
iE-Extensions
   OPTIONAL.
PRACH-LCR-ParametersItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UARFCNforNt
                        CRITICALITY reject
                                                  EXTENSION UARFON
                                                                         PRESENCE optional }.
    -- Applicable to 1.28Mcps TDD when using multiple frequencies. This IE indicates the frequency of secondary on which PRACH to be set up.
PRACH-768-ParametersItem-CTCH-SetupRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                              CommonPhysicalChannelID768,
   t.FCS
                                              TFCS,
   timeslot
                                              TimeSlot,
    tdd-ChannelisationCode768
                                              TDD-ChannelisationCode768,
   maxPRACH-MidambleShifts
                                              MaxPRACH-MidambleShifts,
   pRACH-Midamble
                                              PRACH-Midamble,
                                              RACH-Parameter-CTCH-SetupRqstTDD,
   rACH
                                              ProtocolExtensionContainer { PRACH-768-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
PRACH-768-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FPACH-LCR-Parameters-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                              CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR
                                              TDD-ChannelisationCodeLCR,
   timeslotLCR
                                              TimeSlotLCR,
   midambleShiftLCR
                                              MidambleShiftLCR,
   fPACH-Power
                                              FPACH-Power,
                                              ProtocolExtensionContainer { { FPACH-LCR-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
FPACH-LCR-ParametersItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-UARFCNforNt
                          CRITICALITY reject
                                                  EXTENSION UARFCN
                                                                         PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies. This IE indicates the frequency of Secondary Frequency on which FPACH to be set
up.
PLCCH-parameters ::= SEOUENCE
   maxPowerPLCCH
                                              DL-Power,
    commonPhysicalChannelID
                                              CommonPhysicalChannelID,
    tdd-ChannelisationCode
                                              TDD-ChannelisationCode,
    timeslotLCR
                                              TimeSlotLCR,
   midambleShiftLCR
                                              MidambleShiftLCR,
   iE-Extensions
                                              ProtocolExtensionContainer { { PLCCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
```

```
PLCCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-RUCCH-parameters ::= SEQUENCE {
   commonPhysicalChannelID
                                          CommonPhysicalChannelID,
   timeslot
                                          TimeSlot,
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   maxE-RUCCH-MidambleShifts
                                          MaxPRACH-MidambleShifts,
   e-RUCCH-Midamble
                                          PRACH-Midamble,
   iE-Extensions
                                          ProtocolExtensionContainer { { E-RUCCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
E-RUCCH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-RUCCH-768-parameters ::= SEQUENCE {
   commonPhysicalChannelID768
                                          CommonPhysicalChannelID768,
   timeslot
                                          TimeSlot,
   tdd-ChannelisationCode768
                                          TDD-ChannelisationCode768,
   maxE-RUCCH-MidambleShifts
                                          MaxPRACH-MidambleShifts,
   e-RUCCH-Midamble
                                          PRACH-Midamble,
                                          ProtocolExtensionContainer { { E-RUCCH-768-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
E-RUCCH-768-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
  COMMON TRANSPORT CHANNEL SETUP RESPONSE
  ******************
CommonTransportChannelSetupResponse ::= SEQUENCE {
               ProtocolIE-Container
                                                 {{CommonTransportChannelSetupResponse-IEs}},
   protocolIEs
   protocolExtensions
                                                {{CommonTransportChannelSetupResponse-Extensions}}
                        ProtocolExtensionContainer
                                                                                                      OPTIONAL,
CommonTransportChannelSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
   PRESENCE
   optional
            } |
   { ID id-PCH-Parameters-CTCH-SetupRsp
                                          CRITICALITY ignore TYPE CommonTransportChannel-InformationResponse
                                                                                                                       PRESENCE
   optional
```

```
{ ID id-RACH-Parameters-CTCH-SetupRsp
                                             CRITICALITY ignore TYPE CommonTransportChannel-InformationResponse
                                                                                                                              PRESENCE
   optional
   { ID id-CriticalityDiagnostics
                                             CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                              PRESENCE
   optional
             },
   . . .
CommonTransportChannelSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
FACH-CommonTransportChannel-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF CommonTransportChannel-InformationResponse
    *********************
-- COMMON TRANSPORT CHANNEL SETUP FAILURE
  *****************
CommonTransportChannelSetupFailure ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                     {{CommonTransportChannelSetupFailure-IEs}},
                          ProtocolExtensionContainer {{CommonTransportChannelSetupFailure-Extensions}}
                                                                                                            OPTIONAL,
   protocolExtensions
CommonTransportChannelSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
                                                                                                                                     } |
     ID
           id-Cause
                                     CRITICALITY ignore
                                                           TYPE
                                                                                                            PRESENCE
                                                                                                                       mandatory
                                                                   Cause
     ID
          id-CriticalityDiagnostics CRITICALITY ignore
                                                           TYPE
                                                                   CriticalityDiagnostics
                                                                                                            PRESENCE
                                                                                                                       optional
    },
CommonTransportChannelSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST FDD
__ ********************
CommonTransportChannelReconfigurationRequestFDD ::= SEQUENCE {
                                                    {{CommonTransportChannelReconfigurationRequestFDD-IEs}},
   protocolIEs
                         ProtocolIE-Container
                          ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestFDD-Extensions}}
   protocolExtensions
                                                                                                                       OPTIONAL,
CommonTransportChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID
                                                        CRITICALITY reject TYPE C-ID
   PRESENCE mandatory } |
    { ID id-ConfigurationGenerationID
                                                        CRITICALITY reject TYPE ConfigurationGenerationID
   PRESENCE mandatory } |
```

```
{ ID id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD
                                                            CRITICALITY reject TYPE CommonPhysicalChannelType-CTCH-ReconfRqstFDD
                                                                                                                                        PRESENCE
mandatory },
    . . .
CommonTransportChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonPhysicalChannelType-CTCH-ReconfRqstFDD ::= CHOICE
                                    Secondary-CCPCHList-CTCH-ReconfRqstFDD,
    secondary-CCPCH-parameters
    pRACH-parameters
                                    PRACHList-CTCH-ReconfRqstFDD,
    notUsed-cPCH-parameters
                                    NULL,
Secondary-CCPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE
    fACH-ParametersList-CTCH-ReconfRgstFDD
                                                FACH-ParametersList-CTCH-ReconfRqstFDD
                                                                                                                                OPTIONAL,
    pCH-Parameters-CTCH-ReconfRqstFDD
                                                PCH-Parameters-CTCH-ReconfRgstFDD
                                                                                                                                OPTIONAL,
    pICH-Parameters-CTCH-ReconfRqstFDD
                                                PICH-Parameters-CTCH-ReconfRqstFDD
                                                                                                                                OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                                OPTIONAL,
    . . .
Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MICH-Parameters-CTCH-ReconfRqstFDD
                                                    CRITICALITY reject EXTENSION MICH-Parameters-CTCH-ReconfRqstFDD
                                                                                                                                        PRESENCE
optional
          },
FACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-ReconfRqstFDD }}
FACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-ReconfRqstFDD
                                                      CRITICALITY reject TYPE FACH-ParametersListIE-CTCH-ReconfRqstFDD
                                                                                                                                 PRESENCE
    mandatory }
FACH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxFACHCell)) OF FACH-ParametersItem-CTCH-ReconfRgstFDD
FACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID
                                     CommonTransportChannelID,
    maxFACH-Power
                                     DL-Power
                                                                                                                                OPTIONAL,
                                     ToAWS
    toAWS
                                                                                                                                OPTIONAL,
    toAWE
                                     TOAWE
                                                                                                                                OPTIONAL,
                                     ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                OPTIONAL,
FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID
           id-TnlOos
                                CRITICALITY ignore
                                                        EXTENSION TnlOos
                                                                            PRESENCE optional },
PCH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-ReconfRqstFDD }}
```

```
PCH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-ReconfRgstFDD CRITICALITY reject TYPE PCH-ParametersItem-CTCH-ReconfRgstFDD PRESENCE
                                                                                                                                 mandatory 
PCH-ParametersItem-CTCH-ReconfRgstFDD ::= SEQUENCE {
    commonTransportChannelID
                                      CommonTransportChannelID,
    pCH-Power
                                      DL-Power
                                                                                                                                 OPTIONAL,
    toAWS
                                      TOAWS
                                                                                                                                 OPTIONAL,
    toAWE
                                      ToAWE
                                                                                                                                 OPTIONAL,
                                      ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
PCH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID
           id-TnlOos
                                CRITICALITY ignore
                                                        EXTENSION TnlOos
                                                                             PRESENCE optional },
    . . .
PICH-Parameters-CTCH-ReconfRgstFDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-ReconfRgstFDD }}
PICH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PICH-ParametersItem-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PICH-ParametersItem-CTCH-ReconfRqstFDD
                                                                                                                          PRESENCE
                                                                                                                                         mandatory )
PICH-ParametersItem-CTCH-ReconfRgstFDD ::= SEQUENCE {
                                        CommonPhysicalChannelID,
    commonPhysicalChannelID
    pICH-Power
                                        PICH-Power
                                                         OPTIONAL,
                                        ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-Parameters-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
   mICH-Power
                                        PICH-Power
                                                                                                                                 OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { MICH-Parameters-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                                 OPTIONAL,
MICH-Parameters-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
PRACHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    pRACH-ParametersList-CTCH-ReconfRqstFDD
                                                PRACH-ParametersList-CTCH-ReconfRqstFDD
                                                                                                                                 OPTIONAL,
                                                AICH-ParametersList-CTCH-ReconfRqstFDD
    aICH-ParametersList-CTCH-ReconfRgstFDD
                                                                                                                                 OPTIONAL,
                                                ProtocolExtensionContainer { { PRACH-CTCH-ReconfRqstFDD-ExtIEs} } 
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
```

```
PRACH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRACH-ParametersList-CTCH-ReconfRgstFDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersListIEs-CTCH-ReconfRgstFDD }}
PRACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PRACH-ParametersListIE-CTCH-ReconfRqstFDD
                                                                                                                        PRESENCE
   mandatory }
PRACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF PRACH-ParametersItem-CTCH-ReconfRqstFDD
PRACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                         CommonPhysicalChannelID,
   preambleSignatures
                                         PreambleSignatures
   OPTIONAL,
    allowedSlotFormatInformation
                                         AllowedSlotFormatInformationList-CTCH-ReconfRgstFDD
   OPTIONAL,
   rACH-SubChannelNumbers
                                         RACH-SubChannelNumbers
   OPTIONAL,
                                         ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID
                          CRITICALITY ignore
                                                                    PRESENCE optional },
     id-TnlOos
                                                 EXTENSION TnlOos
AllowedSlotFormatInformationList-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-
ReconfRqstFDD
AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   rACH-SlotFormat
                           RACH-SlotFormat,
   iE-Extensions
                           ProtocolExtensionContainer { { AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                        OPTIONAL,
AllowedSlotFormatInformationItem-CTCH-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ AICH-ParametersListIEs-CTCH-ReconfRqstFDD }}
AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    PRESENCE
   mandatory }
AICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF AICH-ParametersItem-CTCH-ReconfRqstFDD
AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                     CommonPhysicalChannelID,
```

```
aICH-Power
                                       AICH-Power
                                                       OPTIONAL,
    iE-Extensions
                                       ProtocolExtensionContainer
                                                                   OPTIONAL.
AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST TDD
CommonTransportChannelReconfigurationRequestTDD ::= SEQUENCE {
                           ProtocolIE-Container
                                                       {{CommonTransportChannelReconfigurationRequestTDD-IEs}},
    protocolIEs
                           ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestTDD-Extensions}}
    protocolExtensions
                                                                                                                             OPTIONAL,
    . . .
CommonTransportChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     { ID id-C-ID
                                                             CRITICALITY reject
                                                                                          TYPE C-ID
                                                                                                                                PRESENCE
mandatory }|
     { ID id-ConfigurationGenerationID
                                                             CRITICALITY reject
                                                                                          TYPE ConfigurationGenerationID
                                                                                                                                PRESENCE
mandatory } |
     { ID id-Secondary-CCPCH-Parameters-CTCH-ReconfRgstTDD
                                                                                          TYPE Secondary-CCPCH-Parameters-CTCH-ReconfRgstTDD
                                                             CRITICALITY reject
     PRESENCE optional
     { ID id-PICH-Parameters-CTCH-ReconfRgstTDD
                                                             CRITICALITY reject
                                                                                          TYPE PICH-Parameters-CTCH-ReconfRgstTDD
                                                                                                                                     PRESENCE
optional }|
     { ID id-FACH-ParametersList-CTCH-ReconfRgstTDD
                                                             CRITICALITY reject
                                                                                          TYPE FACH-ParametersList-CTCH-ReconfRqstTDD PRESENCE
optional }
     { ID id-PCH-Parameters-CTCH-ReconfRqstTDD
                                                             CRITICALITY reject
                                                                                          TYPE PCH-Parameters-CTCH-ReconfRqstTDD PRESENCE optional
CommonTransportChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-Parameters-CTCH-ReconfRgstTDD
                                                       CRITICALITY reject EXTENSION FPACH-LCR-Parameters-CTCH-ReconfRqstTDD
           PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
    { ID id-MICH-Parameters-CTCH-ReconfRqstTDD
                                                       CRITICALITY reject EXTENSION MICH-Parameters-CTCH-ReconfRqstTDD
               PRESENCE optional } |
    { ID id-PLCCH-Parameters-CTCH-ReconfRqstTDD
                                                       CRITICALITY ignore EXTENSION PLCCH-Parameters-CTCH-ReconfRqstTDD
           PRESENCE optional }
    { ID id-S-CCPCH-768-Parameters-CTCH-ReconfRqstTDD
                                                       CRITICALITY reject EXTENSION Secondary-CCPCH-768-Parameters-CTCH-ReconfRqstTDD
    PRESENCE optional }
    { ID id-PICH-768-Parameters-CTCH-ReconfRqstTDD
                                                       CRITICALITY reject EXTENSION PICH-768-Parameters-CTCH-ReconfRqstTDD
        PRESENCE optional } |
    { ID id-MICH-768-Parameters-CTCH-ReconfRgstTDD
                                                       CRITICALITY reject EXTENSION MICH-768-Parameters-CTCH-ReconfRgstTDD
       PRESENCE optional }
     ID id-UPPCH-LCR-Parameters-CTCH-ReconfRgstTDD
                                                       CRITICALITY reject EXTENSION UPPCH-LCR-Parameters-CTCH-ReconfRgstTDD
    PRESENCE optional }, -- Applicable to 1.28Mcps TDD only
```

```
Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD::= SEQUENCE {
    cCTrCH-ID
                                   CCTrCH-ID.
    secondaryCCPCHList
                                   Secondary-CCPCHList-CTCH-ReconfRgstTDD
                                   ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRgstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-Additional-S-CCPCH-Parameters-CTCH-ReconfRqstTDD
                                                                        CRITICALITY reject EXTENSION Secondary-CCPCH-parameterExtendedList-CTCH-
ReconfRqstTDD
                   PRESENCE optional }|
    -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
    { ID id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRqstTDD
                                                                       CRITICALITY reject EXTENSION Secondary-CCPCH-LCR-parameterExtendedList-
CTCH-ReconfRgstTDD PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
    . . .
Secondary-CCPCHList-CTCH-ReconfRgstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCHListIEs-CTCH-ReconfRgstTDD }}
Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
                                                     CRITICALITY reject TYPE Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
                                                                                                                               PRESENCE
    mandatory }
Secondary-CCPCHListIE-CTCH-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCHItem-CTCH-ReconfRgstTDD
Secondary-CCPCHItem-CTCH-ReconfRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                       CommonPhysicalChannelID,
    sCCPCH-Power
                                       DL-Power
                                                       OPTIONAL,
                                       ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                       OPTIONAL,
Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-parameterExtendedList-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsinExt)) OF Secondary-CCPCHItem-CTCH-ReconfRqstTDD
    -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
Secondary-CCPCH-LCR-parameterExtendedList-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsLCRinExt)) OF Secondary-CCPCHItem-CTCH-
ReconfRqstTDD
    -- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
PICH-Parameters-CTCH-ReconfRostTDD ::= SEOUENCE {
    commonPhysicalChannelID
                                       CommonPhysicalChannelID,
    pICH-Power
                                       PICH-Power
                                                       OPTIONAL,
    iE-Extensions
                                       ProtocolExtensionContainer { { PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                                               OPTIONAL,
PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
```

```
FACH-ParametersList-CTCH-ReconfRgstTDD ::= SEQUENCE (SIZE (0..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-ReconfRgstTDD
FACH-ParametersItem-CTCH-ReconfRgstTDD ::= SEQUENCE {
    commonTransportChannelID
                                    CommonTransportChannelID,
    toAWS
                                    ToAWS
                                                    OPTIONAL,
    TOAWE
                                    ToAWE
                                                    OPTIONAL,
                                    ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD
                                                                                                                         PRESENCE optional
                                                                                                                                                } |
                                                            CRITICALITY reject
                                                                                     EXTENSION DL-Power
    -- Applicable to 1.28Mcps TDD only
    { ID id-TnlOos
                                                            CRITICALITY ignore
                                                                                     EXTENSION TnlOos
                                                                                                                         PRESENCE optional },
PCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
     commonTransportChannelID
                                         CommonTransportChannelID,
     toAWS
                                         ToAWS
                                                                                                                           OPTIONAL,
     toAWE
                                         ToAWE
                                                                                                                           OPTIONAL,
                                         ProtocolExtensionContainer { { PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
     iE-Extensions
                                                                                                                           OPTIONAL,
PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PCH-Power-LCR-CTCH-ReconfRqstTDD
                                                                                                                     PRESENCE optional }
                                                    CRITICALITY reject
                                                                             EXTENSION DL-Power
    -- Applicable to 1.28Mcps TDD only
    { ID id-TnlQos
                                                                                                                     PRESENCE optional },
                                                    CRITICALITY ignore
                                                                             EXTENSION TnlQos
    . . .
FPACH-LCR-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelId
                                    CommonPhysicalChannelID,
    fPACHPower
                                    FPACH-Power
                                                    OPTIONAL,
                                    ProtocolExtensionContainer { { FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
   mICH-Power
                                        PICH-Power
                                                                                                                                 OPTIONAL,
                                        ProtocolExtensionContainer { { MICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
MICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
PLCCH-Parameters-CTCH-ReconfRgstTDD ::= SEQUENCE {
    maxPowerPLCCH
                                        ProtocolExtensionContainer { { PLCCH-Parameters-CTCH-ReconfRgstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
PLCCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-768-Parameters-CTCH-ReconfRqstTDD::= SEQUENCE {
                                    CCTrCH-ID,
    secondaryCCPCH768List
                                    Secondary-CCPCH-768-List-CTCH-ReconfRqstTDD
                                                                                        OPTIONAL,
                                    ProtocolExtensionContainer { { Secondary-CCPCH-768-CTCH-ReconfRgstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
Secondary-CCPCH-768-CTCH-ReconfRqstTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-768-List-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs768)) OF Secondary-CCPCH-768-Item-CTCH-ReconfRqstTDD
Secondary-CCPCH-768-Item-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                        CommonPhysicalChannelID768,
    sCCPCH-Power
                                        DL-Power
                                                        OPTIONAL,
                                        ProtocolExtensionContainer { Secondary-CCPCH-768-Item-CTCH-ReconfRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                        OPTIONAL,
    . . .
Secondary-CCPCH-768-Item-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PICH-768-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE
    commonPhysicalChannelID768
                                        CommonPhysicalChannelID768,
    pICH-Power
                                        PICH-Power
                                                        OPTIONAL,
                                        ProtocolExtensionContainer { { PICH-768-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                        OPTIONAL,
PICH-768-Parameters-CTCH-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-768-Parameters-CTCH-ReconfRgstTDD ::= SEQUENCE {
                                        CommonPhysicalChannelID768,
    commonPhysicalChannelID768
   mICH-Power
                                        PICH-Power
                                                                                                                                        OPTIONAL,
   iE-Extensions
                                        ProtocolExtensionContainer { { MICH-768-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                                                        OPTIONAL,
```

```
MICH-768-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UPPCH-LCR-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    uPPCHPositionLCR
                                     UPPCHPositionLCR
                                                                                                                 OPTIONAL,
    11ARFCN
                                     UARFCN
                                                                                                                 OPTIONAL,
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies Corresponds to Nt [15]
                                     ProtocolExtensionContainer { { UPPCH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                                 OPTIONAL,
    . . .
UPPCH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ····
-- COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE
       ********************
CommonTransportChannelReconfigurationResponse ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                   {{CommonTransportChannelReconfigurationResponse-IEs}},
                         ProtocolExtensionContainer {{CommonTransportChannelReconfigurationResponse-Extensions}}
   protocolExtensions
                                                                                                                     OPTIONAL,
CommonTransportChannelReconfigurationResponse-IES NBAP-PROTOCOL-IES ::= {
   { ID
          id-CriticalityDiagnostics
                                        CRITICALITY
                                                                     TYPE
                                                                             CriticalityDiagnostics
                                                       ignore
                                                                                                              PRESENCE
                                                                                                                            optional},
   . . .
CommonTransportChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
CommonTransportChannelReconfigurationFailure ::= SEQUENCE
   protocolIEs
                         ProtocolIE-Container
                                                   {{CommonTransportChannelReconfigurationFailure-IEs}},
                         ProtocolExtensionContainer {{CommonTransportChannelReconfigurationFailure-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
CommonTransportChannelReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID
          id-Cause
                                        CRITICALITY ignore
                                                                  TYPE
                                                                                                              PRESENCE
                                                                                                                            mandatory } |
                                                                         Cause
```

```
ID
         id-CriticalityDiagnostics
                                    CRITICALITY ignore
                                                            TYPE
                                                                   CriticalityDiagnostics
                                                                                                                 optional
                                                                                                    PRESENCE
   . . .
CommonTransportChannelReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    *****************
  COMMON TRANSPORT CHANNEL DELETION REQUEST
     CommonTransportChannelDeletionRequest ::= SEQUENCE {
                          ProtocolIE-Container
                                                   {CommonTransportChannelDeletionRequest-IEs}},
   protocolIEs
   protocolExtensions
                          ProtocolExtensionContainer
                                                  {{CommonTransportChannelDeletionRequest-Extensions}}
                                                                                                    OPTIONAL,
   . . .
CommonTransportChannelDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
         id-C-ID
    ID
                                        CRITICALITY reject
                                                            TYPE C-ID
                                                                                                 PRESENCE mandatory }
         id-CommonPhysicalChannelID
                                        CRITICALITY reject
    ID
                                                            TYPE CommonPhysicalChannelID
                                                                                                 PRESENCE mandatory }
         id-ConfigurationGenerationID
    ID
                                        CRITICALITY reject
                                                            TYPE ConfigurationGenerationID
                                                                                                 PRESENCE mandatory },
   . . .
CommonTransportChannelDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional },
   . . .
  ****************
  COMMON TRANSPORT CHANNEL DELETION RESPONSE
  CommonTransportChannelDeletionResponse ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                               {{CommonTransportChannelDeletionResponse-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer
                                              {{CommonTransportChannelDeletionResponse-Extensions}}
                                                                                                          OPTIONAL,
   . . .
CommonTransportChannelDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID
         id-CriticalityDiagnostics
                                    CRITICALITY
                                                  ignore
                                                            TYPE
                                                                  CriticalityDiagnostics
                                                                                                    PRESENCE
                                                                                                                 optional},
   . . .
CommonTransportChannelDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
__ *********************
-- BLOCK RESOURCE REQUEST
     ****************
BlockResourceRequest ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                                {{BlockResourceRequest-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer
                                               {{BlockResourceRequest-Extensions}}
                                                                                                  OPTIONAL,
BlockResourceRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                     CRITICALITY reject
                                                         TYPE C-ID
                                                                                                  PRESENCE mandatory }
     ID id-BlockingPriorityIndicator
                                     CRITICALITY reject
                                                         TYPE BlockingPriorityIndicator
                                                                                                  PRESENCE mandatory }
   { ID id-ShutdownTimer
                                     CRITICALITY reject
                                                         TYPE ShutdownTimer
                                                                                                  PRESENCE conditional
   -- The IE shall be present if the Blocking Priority Indicator IE indicates "Normal Priority"--
BlockResourceRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    *****************
-- BLOCK RESOURCE RESPONSE
__ *********************
BlockResourceResponse ::= SEQUENCE {
   protocolIEs
                                                   {{BlockResourceResponse-IEs}},
                           ProtocolIE-Container
   protocolExtensions
                           ProtocolExtensionContainer {{BlockResourceResponse-Extensions}}
                                                                                                      OPTIONAL,
BlockResourceResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                 CRITICALITY ignore
                                                                                 PRESENCE optional },
                                                      TYPE CriticalityDiagnostics
BlockResourceResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- BLOCK RESOURCE FAILURE
  *****************
BlockResourceFailure ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                                {{BlockResourceFailure-IEs}},
                                               {{BlockResourceFailure-Extensions}}
   protocolExtensions
                       ProtocolExtensionContainer
                                                                                 OPTIONAL,
```

```
BlockResourceFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Cause
                                    CRITICALITY ignore
                                                          TYPE Cause
                                                                                                         PRESENCE mandatory } |
   ID id-CriticalityDiagnostics
                                    CRITICALITY ignore
                                                          TYPE CriticalityDiagnostics
                                                                                                         PRESENCE optional
BlockResourceFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- UNBLOCK RESOURCE INDICATION
__ ********************
UnblockResourceIndication ::= SEQUENCE {
   protocolIEs
                ProtocolIE-Container
                                                   {{UnblockResourceIndication-IEs}},
   protocolExtensions ProtocolExtensionContainer {{UnblockResourceIndication-Extensions}}
                                                                                           OPTIONAL,
UnblockResourceIndication-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-C-ID
                 CRITICALITY ignore
                                               TYPE C-ID
                                                              PRESENCE mandatory },
   . . .
UnblockResourceIndication-Extensions NBAP-PROTOCOL-EXTENSION ::=
-- AUDIT REOUIRED INDICATION
__ ********************
AuditRequiredIndication ::= SEQUENCE {
                                                   {{AuditRequiredIndication-IEs}},
   protocolIEs
                    ProtocolIE-Container
   protocolExtensions
                      ProtocolExtensionContainer {{AuditRequiredIndication-Extensions}}
                                                                                                         OPTIONAL,
AuditRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
AuditRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
__ *********************
-- AUDIT REQUEST
  *****************
AuditRequest ::= SEQUENCE {
   protocolIEs
                             ProtocolIE-Container
                                                       {{AuditRequest-IEs}},
   protocolExtensions
                            ProtocolExtensionContainer
                                                      {{AuditRequest-Extensions}}
                                                                                   OPTIONAL,
AuditRequest-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-Start-Of-Audit-Sequence-Indicator
                                               CRITICALITY reject TYPE Start-Of-Audit-Sequence-Indicator
                                                                                                            PRESENCE mandatory },
AuditRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- AUDIT RESPONSE
  AuditResponse ::= SEQUENCE {
   protocolIEs
                             ProtocolIE-Container
                                                       {{AuditResponse-IEs}},
                                                      {{AuditResponse-Extensions}}
   protocolExtensions
                            ProtocolExtensionContainer
                                                                                       OPTIONAL,
   . . .
AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-End-Of-Audit-Sequence-Indicator
                                                  CRITICALITY ignore TYPE End-Of-Audit-Sequence-Indicator
                                                                                                                          PRESENCE
mandatory } |
   { ID id-Cell-InformationList-AuditRsp
                                                  CRITICALITY ignore TYPE Cell-InformationList-AuditRsp
                                                                                                                          PRESENCE
optional }
   { ID id-CCP-InformationList-AuditRsp
                                                  CRITICALITY ignore TYPE CCP-InformationList-AuditRsp
                                                                                                                          PRESENCE
optional }
   -- CCP (Communication Control Port) --
   { ID id-Local-Cell-InformationList-AuditRsp
                                                   CRITICALITY ignore TYPE Local-Cell-InformationList-AuditRsp
                                                                                                                          PRESENCE
optional }|
                                                  CRITICALITY ignore TYPE Local-Cell-Group-InformationList-AuditRsp
     ID id-Local-Cell-Group-InformationList-AuditRsp
                                                                                                                   PRESENCE optional } |
    ID id-CriticalityDiagnostics
                                                  CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                          PRESENCE
optional },
   . . .
AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Power-Local-Cell-Group-InformationList-AuditRsp CRITICALITY ignore EXTENSION Power-Local-Cell-Group-InformationList-AuditRsp
   PRESENCE optional },
```

```
Cell-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}
Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
           id-Cell-InformationItem-AuditRsp
                                                    CRITICALITY ignore
                                                                            TYPE Cell-InformationItem-AuditRsp
                                                                                                                                 PRESENCE optional
Cell-InformationItem-AuditRsp ::= SEQUENCE {
     configurationGenerationID
                                            ConfigurationGenerationID,
     resourceOperationalState
                                            ResourceOperationalState,
     availabilityStatus
                                            AvailabilityStatus,
     local-Cell-ID
                                            Local-Cell-ID,
     primary-SCH-Information
                                            P-SCH-Information-AuditRsp
                                                                                                                             OPTIONAL,
     secondary-SCH-Information
                                            S-SCH-Information-AuditRsp
                                                                                                                             OPTIONAL,
                                            P-CPICH-Information-AuditRsp
     primary-CPICH-Information
                                                                                                                             OPTIONAL,
                                            S-CPICH-InformationList-AuditRsp
     secondary-CPICH-InformationList
                                                                                                                             OPTIONAL,
     primary-CCPCH-Information
                                            P-CCPCH-Information-AuditRsp
                                                                                                                             OPTIONAL,
     bCH-Information
                                            BCH-Information-AuditRsp
                                                                                                                             OPTIONAL,
     secondary-CCPCH-InformationList
                                            S-CCPCH-InformationList-AuditRsp
                                                                                                                             OPTIONAL,
     pCH-Information
                                            PCH-Information-AuditRsp
                                                                                                                             OPTIONAL,
     pICH-Information
                                            PICH-Information-AuditRsp
                                                                                                                             OPTIONAL,
     fACH-InformationList
                                            FACH-InformationList-AuditRsp
                                                                                                                             OPTIONAL,
     pRACH-InformationList
                                            PRACH-InformationList-AuditRsp
                                                                                                                             OPTIONAL,
     rACH-InformationList
                                            RACH-InformationList-AuditRsp
                                                                                                                             OPTIONAL,
                                            AICH-InformationList-AuditRsp
     aICH-InformationList
                                                                                                                             OPTIONAL,
     notUsed-1-pCPCH-InformationList
                                            NULL
                                                                                                                             OPTIONAL,
     notUsed-2-cPCH-InformationList
                                            NULL
                                                                                                                             OPTIONAL,
     notUsed-3-aP-AICH-InformationList
                                            NULL
                                                                                                                             OPTIONAL,
     notUsed-4-cDCA-ICH-InformationList
                                            NULL
                                                                                                                             OPTIONAL,
     sCH-Information
                                            SCH-Information-AuditRsp
                                                                                                                             OPTIONAL,
     iE-Extensions
                                            ProtocolExtensionContainer { { Cell-InformationItem-AuditRsp-ExtIEs} }
                                                                                                                             OPTIONAL,
Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-InformationList-AuditRsp
                                                    CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-AuditRsp
                                                                                                                                        PRESENCE
optional }
    -- Applicable to 1.28Mcps TDD only
    { ID id-DwPCH-LCR-InformationList-AuditRsp
                                                    CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information
                                                                                                                                 PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    { ID id-HSDSCH-Resources-Information-AuditRsp
                                                    CRITICALITY ignore EXTENSION HS-DSCH-Resources-Information-AuditRsp
                                                                                                                                        PRESENCE
optional }|
    -- For 1.28Mcps TDD, this HS-DSCH Resource Information is for the first Frequency repetition, HS-DSCH Resource Information for Frequency
repetitions 2 and on, should be defined in MultipleFreq-HS-DSCH-Resources-InformationList-AuditRsp.
                                                    CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information
    { ID id-MICH-Information-AuditRsp
                                                                                                                                        PRESENCE
optional }
    { ID id-S-CCPCH-InformationListExt-AuditRsp
                                                    CRITICALITY ignore EXTENSION S-CCPCH-InformationListExt-AuditRsp
    PRESENCE optional } |
    -- Applicable to 3.84Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the cell.
    { ID id-S-CCPCH-LCR-InformationListExt-AuditRsp CRITICALITY ignore EXTENSION S-CCPCH-LCR-InformationListExt-AuditRsp
    PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the cell.
```

```
{ ID id-E-DCH-Resources-Information-AuditRsp
                                                  CRITICALITY ignore EXTENSION E-DCH-Resources-Information-AuditRsp
    PRESENCE optional } |
    -- For 1.28Mcps TDD, this E-DCH Resource Information is for the first Frequency repetition, E-DCH Resource Information for Frequency
repetitions 2 and on, should be defined in MultipleFreq-E-DCH-Resources-InformationList-AuditRsp.
    { ID id-PLCCH-InformationList-AuditRsp
                                                  CRITICALITY ignore EXTENSION PLCCH-InformationList-AuditRsp
    PRESENCE optional }
     ID id-P-CCPCH-768-Information-AuditRsp
                                                  CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768 PRESENCE optional }
     ID id-S-CCPCH-768-InformationList-AuditRsp
                                                  CRITICALITY ignore EXTENSION S-CCPCH-768-InformationList-AuditRsp
    PRESENCE optional } |
     ID id-PICH-768-Information-AuditRsp
                                                  CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768 PRESENCE optional }
     ID id-PRACH-768-InformationList-AuditRsp
                                                  CRITICALITY ignore EXTENSION PRACH-768-InformationList-AuditRsp
    PRESENCE optional } |
     ID id-SCH-768-Information-AuditRsp
                                                  CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768 PRESENCE optional }
     ID id-MICH-768-Information-AuditRsp
                                                  CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768 PRESENCE optional }
    ID id-E-RUCCH-InformationList-AuditRsp
                                                  CRITICALITY ignore EXTENSION E-RUCCH-InformationList-AuditRsp
    PRESENCE optional }
    { ID id-E-RUCCH-768-InformationList-AuditRsp
                                                  CRITICALITY ignore EXTENSION E-RUCCH-768-InformationList-AuditRsp
    PRESENCE optional } |
    { ID id-Cell-Frequency-List-Information-LCR-MulFreq-AuditRsp
                                                                 CRITICALITY ignore EXTENSION Cell-Frequency-List-Information-LCR-MulFreq-
AuditRsp
            PRESENCE optional } -- Applicable to 1.28Mcps TDD when using multiple frequencies
    { ID id-UPPCH-LCR-InformationList-AuditRsp
                                                  CRITICALITY ignore
                                                                         EXTENSION UPPCH-LCR-InformationList-AuditRsp
                                                                                                                                  PRESENCE
optional }|
      -- Applicable to 1.28Mcps TDD only
    { ID id-multipleFreg-HS-DSCH-Resources-InformationList-AuditRsp CRITICALITY ignore EXTENSION MultipleFreg-HS-DSCH-Resources-InformationList-
AuditRsp PRESENCE optional } |
-- Applicable to 1.28Mcps TDD when using multiple frequencies. This HS-DSCH Resource Information is for the 2nd and beyond frequencies.
    AuditRsp PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies. This E-DCH Resource Information is for the 2nd and beyond frequencies.
P-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-AuditRsp }}
P-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-P-SCH-Information
                                           CRITICALITY ignore
                                                                   TYPE Common-PhysicalChannel-Status-Information
                                                                                                                      PRESENCE
                                                                                                                                 mandatory }
S-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-AuditRsp }}
S-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-S-SCH-Information
                                           CRITICALITY ignore
                                                                  TYPE Common-PhysicalChannel-Status-Information
                                                                                                                      PRESENCE
                                                                                                                                 mandatory }
P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}
P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-P-CPICH-Information
                                           CRITICALITY ignore
                                                                   TYPE Common-PhysicalChannel-Status-Information
                                                                                                                      PRESENCE
                                                                                                                                 mandatory }
S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}
S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-S-CPICH-Information
                                           CRITICALITY ignore
                                                                   TYPE Common-PhysicalChannel-Status-Information
                                                                                                                      PRESENCE mandatory }
```

```
P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}
P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-P-CCPCH-Information
                                             CRITICALITY ignore
                                                                      TYPE Common-PhysicalChannel-Status-Information
                                                                                                                           PRESENCE mandatory }
BCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ BCH-InformationIE-AuditRsp }}
BCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-BCH-Information
                                             CRITICALITY ignore
                                                                      TYPE Common-TransportChannel-Status-Information
                                                                                                                           PRESENCE mandatory }
S-CCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp }}
S-CCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-S-CCPCH-Information
                                             CRITICALITY ignore
                                                                      TYPE Common-PhysicalChannel-Status-Information
                                                                                                                           PRESENCE mandatory }
PCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PCH-InformationIE-AuditRsp }}
PCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-PCH-Information
                                             CRITICALITY ignore
                                                                      TYPE Common-TransportChannel-Status-Information
                                                                                                                           PRESENCE mandatory }
PICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PICH-InformationIE-AuditRsp }}
PICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-PICH-Information
                                             CRITICALITY ignore
                                                                      TYPE Common-PhysicalChannel-Status-Information
                                                                                                                           PRESENCE mandatory }
FACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-AuditRsp }}
FACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-FACH-Information
                                             CRITICALITY ignore
                                                                      TYPE Common-TransportChannel-Status-Information
                                                                                                                           PRESENCE mandatory }
PRACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-AuditRsp }}
PRACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-PRACH-Information
                                             CRITICALITY ignore
                                                                      TYPE Common-PhysicalChannel-Status-Information
                                                                                                                           PRESENCE mandatory }
RACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-AuditRsp }}
RACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-RACH-Information
                                             CRITICALITY ignore
                                                                      TYPE Common-TransportChannel-Status-Information
                                                                                                                           PRESENCE mandatory }
AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}
AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
     { ID id-AICH-Information
                                             CRITICALITY ignore
                                                                      TYPE Common-PhysicalChannel-Status-Information
                                                                                                                           PRESENCE mandatory }
```

```
SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}
SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-SCH-Information
                                          CRITICALITY ignore
                                                                 TYPE Common-PhysicalChannel-Status-Information
                                                                                                                   PRESENCE mandatory }
FPACH-LCR-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-AuditRsp }}
FPACH-LCR-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    TYPE Common-PhysicalChannel-Status-Information
                                                                                                                   PRESENCE mandatory }
HS-DSCH-Resources-Information-AuditRsp ::= SEQUENCE {
   resourceOperationalState
                                     ResourceOperationalState,
   availabilityStatus
                                     AvailabilityStatus,
   iE-Extensions
                                     ProtocolExtensionContainer {{ HS-DSCH-Resources-Information-AuditRsp-ExtIEs }}
                                                                                                                       OPTIONAL,
   . . .
HS-DSCH-Resources-Information-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                         CRITICALITY ignore
   { ID id-UARFCNforNt
                                                EXTENSION UARFCN
                                                                       PRESENCE
                                                                                  optional },
   -- Applicable to 1.28Mcps TDD when using multiple frequencies.
S-CCPCH-InformationListExt-AuditRsp ::= SEOUENCE (SIZE (1..maxSCCPCHCellinExt)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-
AuditRsp }}
S-CCPCH-LCR-InformationListExt-AuditRsp ::= SEOUENCE (SIZE (1..maxSCCPCHCellinExtLCR)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-
AuditRsp }}
E-DCH-Resources-Information-AuditRsp ::= SEQUENCE {
   resourceOperationalState
                                     ResourceOperationalState,
   availabilityStatus
                                     AvailabilityStatus,
   iE-Extensions
                                     ProtocolExtensionContainer {{ E-DCH-Resources-Information-AuditRsp-ExtIEs }}
                                                                                                                       OPTIONAL,
E-DCH-Resources-Information-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-UARFCNforNt
                        CRITICALITY ignore
                                                EXTENSION UARFON
                                                                       PRESENCE
                                                                                  optional },
   -- Applicable to 1.28Mcps TDD when using multiple frequencies.
PLCCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPLCCHCell)) OF ProtocolIE-Single-Container {{ PLCCH-InformationItemIE-AuditRsp }}
PLCCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
S-CCPCH-768-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell768)) OF ProtocolIE-Single-Container {{ S-CCPCH-768-InformationItemIE-
AuditRsp }}
```

```
S-CCPCH-768-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
PRACH-768-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-768-InformationItemIE-AuditRsp }}
PRACH-768-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
E-RUCCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxE-RUCCHCell)) OF ProtocolIE-Single-Container {{ E-RUCCH-InformationItemIE-AuditRsp }}
E-RUCCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   TYPE Common-PhysicalChannel-Status-Information
                                                                                            PRESENCE mandatory }
E-RUCCH-768-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxE-RUCCHCell)) OF ProtocolIE-Single-Container {{ E-RUCCH-768-InformationItemIE-
AuditRsp }}
E-RUCCH-768-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   TYPE Common-PhysicalChannel-Status-Information768
                                                                                            PRESENCE mandatory }
Cell-Frequency-List-Information-LCR-MulFreq-AuditRsp ::= SEQUENCE (SIZE (1..maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ Cell-Frequency-
List-InformationIE-LCR-MulFreq-AuditRsp }}
Cell-Frequency-List-InformationIE-LCR-MulFreq-AuditRsp NBAP-PROTOCOL-IES ::= {
   AuditRsp
            PRESENCE mandatory }
Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp ::= SEQUENCE
                              UARFCN,
   resourceOperationalState
                              ResourceOperationalState,
   availabilityStatus
                              AvailabilityStatus,
   iE-Extensions
                              ProtocolExtensionContainer {{ Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp-ExtIEs }}
   OPTIONAL,
Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UPPCH-LCR-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ UPPCH-LCR-InformationIE-AuditRsp
} }
UPPCH-LCR-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
UPPCH-LCR-InformationItem-AuditRsp ::= SEQUENCE {
   uARFCN
                              UARFCN
                                              OPTIONAL,
```

```
uPPCHPositionLCR
                                      UPPCHPositionLCR,
   resourceOperationalState
                                      ResourceOperationalState,
                                      AvailabilityStatus.
    availabilityStatus
   iE-Extensions
                                      ProtocolExtensionContainer {{ UPPCH-LCR-InformationItem-AuditRsp-ExtIEs }}
                                                                                                                  OPTIONAL,
UPPCH-LCR-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleFreq-HS-DSCH-Resources-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-Container
{{ MultipleFreg-HS-DSCH-Resources-InformationItem-AuditRsp}}
--Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreq-HS-DSCH-Resources-InformationItem-AuditRsp NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
MultipleFreq-E-DCH-Resources-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-Container {{ MultipleFreq-
E-DCH-Resources-InformationItem-AuditRsp}}
    -- Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreq-E-DCH-Resources-InformationItem-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-E-DCH-Resources-Information-AuditRsp CRITICALITY ignore TYPE E-DCH-Resources-Information-AuditRsp
                                                                                                                  PRESENCE mandatory }
CCP-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}
CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-CCP-InformationItem-AuditRsp
                                                 CRITICALITY ignore
                                                                            TYPE CCP-InformationItem-AuditRsp
                                                                                                                          PRESENCE mandatory }
CCP-InformationItem-AuditRsp ::= SEQUENCE {
    communicationControlPortID
                                      CommunicationControlPortID,
   resourceOperationalState
                                      ResourceOperationalState,
   availabilityStatus
                                      AvailabilityStatus,
                                      ProtocolExtensionContainer {{ CCP-InformationItem-AuditRsp-ExtIEs }}
   iE-Extensions
                                                                                                                  OPTIONAL,
CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Local-Cell-InformationList-AuditRsp ::=SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-
AuditRsp }}
Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem-AuditRsp
                                                 CRITICALITY ignore TYPE Local-Cell-InformationItem-AuditRsp
                                                                                                              PRESENCE
                                                                                                                          mandatory}
Local-Cell-InformationItem-AuditRsp ::= SEQUENCE
   local-Cell-ID
                                             Local-Cell-ID,
```

```
dl-or-global-capacityCredit
                                                DL-or-Global-CapacityCredit,
    ul-capacityCredit
                                                UL-CapacityCredit
    OPTIONAL.
    commonChannelsCapacityConsumptionLaw
                                                CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw
                                                DedicatedChannelsCapacityConsumptionLaw,
    maximumDL-PowerCapability
                                                MaximumDL-PowerCapability
    OPTIONAL,
    minSpreadingFactor
                                                MinSpreadingFactor
    OPTIONAL,
    minimumDL-PowerCapability
                                                MinimumDL-PowerCapability
    OPTIONAL,
                                                Local-Cell-ID
    local-Cell-Group-ID
    OPTIONAL.
    iE-Extensions
                                                ProtocolExtensionContainer {{ Local-Cell-InformationItem-AuditRsp-ExtIEs}}
                                                                                                                                         OPTIONAL.
Local-Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-ReferenceClockAvailability
                                                CRITICALITY ignore
                                                                             EXTENSION ReferenceClockAvailability
                                                                                                                                 PRESENCE
    optional }|
    { ID id-Power-Local-Cell-Group-ID
                                                CRITICALITY ignore
                                                                             EXTENSION Local-Cell-ID
                                                                                                                                 PRESENCE
    optional }|
    { ID id-HSDPA-Capability
                                                CRITICALITY ignore
                                                                             EXTENSION HSDPA-Capability
                                                                                                                                 PRESENCE
    optional }|
    { ID id-E-DCH-Capability
                                                CRITICALITY ignore
                                                                             EXTENSION E-DCH-Capability
                                                                                                                                 PRESENCE
    optional }|
    { ID id-E-DCH-TTI2ms-Capability
                                                CRITICALITY ignore
                                                                             EXTENSION E-DCH-TTI2ms-Capability
                                                                                                                                 PRESENCE
    conditional }|
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
    { ID id-E-DCH-SF-Capability
                                                CRITICALITY ignore
                                                                             EXTENSION E-DCH-SF-Capability
                                                                                                                                 PRESENCE
    conditional }
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
    { ID id-E-DCH-HARQ-Combining-Capability
                                                CRITICALITY ignore
                                                                             EXTENSION E-DCH-HARQ-Combining-Capability
                                                                                                                                 PRESENCE
    conditional }|
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
    { ID id-E-DCH-CapacityConsumptionLaw
                                                CRITICALITY ignore
                                                                             EXTENSION E-DCHCapacityConsumptionLaw
                                                                                                                                 PRESENCE
    optional }|
    { ID id-F-DPCH-Capability
                                                CRITICALITY ignore
                                                                             EXTENSION F-DPCH-Capability
                                                                                                                                 PRESENCE
    optional }|
    { ID id-E-DCH-TDD-CapacityConsumptionLaw
                                                CRITICALITY ignore
                                                                             EXTENSION E-DCH-TDD-CapacityConsumptionLaw
                                                                                                                                 PRESENCE
    optional }|
    { ID id-ContinuousPacketConnectivityDTX-DRX-Capability
                                                                     CRITICALITY ignore
                                                                                                 EXTENSION ContinuousPacketConnectivityDTX-DRX-
Capability
                    PRESENCE
                                optional }|
    { ID id-Max-UE-DTX-Cycle
                                                CRITICALITY ignore
                                                                             EXTENSION Max-UE-DTX-Cycle
                                                                                                                                 PRESENCE
    conditional } |
    -- The IE shall be present if Continuous Packet Connectivity DTX-DRX Capability IE is present and set to 'Continuous Packet Connectivity DTX-
DRX Capable'.
    { ID id-ContinuousPacketConnectivityHS-SCCH-less-Capability
                                                                    CRITICALITY ignore
                                                                                                 EXTENSION ContinuousPacketConnectivityHS-SCCH-less-
Capability
                    PRESENCE
                                optional }|
    { ID id-MIMO-Capability
                                                CRITICALITY ignore
                                                                             EXTENSION MIMO-Capability
                                                                                                                                 PRESENCE
    optional }|
    { ID id-SixtyfourOAM-DL-Capability
                                                CRITICALITY ignore
                                                                             EXTENSION SixtyfourOAM-DL-Capability
                                                                                                                                 PRESENCE
    optional }|
```

```
{ ID id-MBMS-Capability
                                              CRITICALITY ignore
                                                                          EXTENSION MBMS-Capability
                                                                                                                            PRESENCE
    optional }|
    { ID id-Enhanced-FACH-Capability
                                              CRITICALITY ignore
                                                                          EXTENSION Enhanced-FACH-Capability
                                                                                                                            PRESENCE
    optional }|
    { ID id-Enhanced-PCH-Capability
                                              CRITICALITY ignore
                                                                          EXTENSION Enhanced-PCH-Capability
                                                                                                                            PRESENCE
    conditional }|
    -- The IE shall be present if Enhanced FACH Capability IE is set to 'Enhanced FACH Capable'.
    { ID id-SixteenOAM-UL-Capability
                                              CRITICALITY ignore
                                                                          EXTENSION SixteenOAM-UL-Capability
                                                                                                                            PRESENCE
    optional }|
    { ID id-HSDSCH-MACdPDU-SizeCapability
                                                                          EXTENSION HSDSCH-MACdPDU-SizeCapability
                                              CRITICALITY ignore
                                                                                                                            PRESENCE
    optional }|
    { ID id-MBSFN-Only-Mode-Capability
                                              CRITICALITY ignore
                                                                          EXTENSION MBSFN-Only-Mode-Capability
                                                                                                                            PRESENCE
    optional }|
    { ID id-F-DPCH-SlotFormatCapability
                                              CRITICALITY ignore
                                                                          EXTENSION F-DPCH-SlotFormatCapability
                                                                                                                            PRESENCE
    optional }|
    { ID id-E-DCH-MACdPDU-SizeCapability
                                              CRITICALITY ignore
                                                                          EXTENSION E-DCH-MACdPDU-SizeCapability
                                                                                                                            PRESENCE
    optional }|
    { ID id-Common-EDCH-Capability
                                              CRITICALITY ignore
                                                                          EXTENSION Common-EDCH-Capability
                                                                                                                            PRESENCE
    optional }|
    { ID id-E-AI-Capability
                                          CRITICALITY ignore
                                                                      EXTENSION E-AI-Capability
                                                                                                                            PRESENCE
    optional }|
    -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
    { ID id-Enhanced-UE-DRX-Capability
                                               CRITICALITY ignore
                                                                          EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                            PRESENCE
    optional }
    { ID id-Enhanced-UE-DRX-CapabilityLCR
                                              CRITICALITY ignore
                                                                          EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                            PRESENCE
    optional }|
     ID id-E-DPCCH-Power-Boosting-Capability CRITICALITY ignore
                                                                          EXTENSION E-DPCCH-Power-Boosting-Capability PRESENCE
                                                                                                                                   optional }|
    { ID id-SixtyfourOAM-DL-MIMO-Combined-Capability
                                                      CRITICALITY ignore EXTENSION SixtyfourOAM-DL-MIMO-Combined-Capability
           PRESENCE
                      optional}
    { ID id-Multi-Cell-Capability-Info
                                              CRITICALITY ignore
                                                                          EXTENSION Multi-Cell-Capability-Info
                                                                                                                            PRESENCE
    optional }|
    { ID id-Semi-PersistentScheduling-CapabilityLCR
                                                      CRITICALITY ignore
                                                                                  EXTENSION Semi-PersistentScheduling-CapabilityLCR
    PRESENCE
               optional }|
    { ID id-ContinuousPacketConnectivity-DRX-CapabilityLCR
                                                              CRITICALITY ignore
                                                                                         EXTENSION ContinuousPacketConnectivity-DRX-
                       PRESENCE optional }
CapabilityLCR
    { ID id-Common-E-DCH-HSDPCCH-Capability
                                                          CRITICALITY ignore
                                                                                      EXTENSION Common-E-DCH-HSDPCCH-Capability
    PRESENCE
               optional }|
    -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
    { ID id-MIMO-Power-Offset-For-S-CPICH-Capability
                                                          CRITICALITY ignore
                                                                                     EXTENSION MIMO-PowerOffsetForS-CPICHCapability
    PRESENCE
               optional }
    { ID id-TxDiversityOnDLControlChannelsByMIMOUECapability
                                                              CRITICALITY ignore EXTENSION TxDiversityOnDLControlChannelsByMIMOUECapability
                   optional }
     optional }|
                                                                                                                 PRESENCE
    { ID id-PrecodingWeightSetRestriction
                                              CRITICALITY ignore EXTENSION PrecodingWeightSetRestriction
                                                                                                                     PRESENCE
                                                                                                                                   optional },
    . . .
Local-Cell-Group-InformationList-AuditRsp
                                           ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE-AuditRsp }}
Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-Group-InformationItem-AuditRsp CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-AuditRsp
                                                                                                                            PRESENCE mandatory
```

```
Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
    local-Cell-Group-ID
                                               Local-Cell-ID,
    dl-or-global-capacityCredit
                                               DL-or-Global-CapacityCredit,
    ul-capacityCredit
                                               UL-CapacityCredit
                                                                                       OPTIONAL,
    commonChannelsCapacityConsumptionLaw
                                               CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw
                                               DedicatedChannelsCapacityConsumptionLaw,
                                               ProtocolExtensionContainer {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}
    iE-Extensions
    OPTIONAL,
Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-E-DCH-CapacityConsumptionLaw
                                                                                                                              PRESENCE
                                               CRITICALITY ignore
                                                                           EXTENSION E-DCHCapacityConsumptionLaw
    optional }|
    { ID id-E-DCH-TDD-CapacityConsumptionLaw
                                               CRITICALITY ignore
                                                                           EXTENSION E-DCH-TDD-CapacityConsumptionLaw
                                                                                                                              PRESENCE
    optional },
    . . .
Power-Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-
Group-InformationItemIE-AuditRsp }}
Power-Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::=
          id-Power-Local-Cell-Group-InformationItem-AuditRsp
                                                                       CRITICALITY
                                                                                       ignore
                                                                                                               Power-Local-Cell-Group-
InformationItem-AuditRsp
                               PRESENCE
                                           mandatory}
Power-Local-Cell-Group-InformationItem-AuditRsp ::= SEOUENCE {
    power-Local-Cell-Group-ID
                                               Local-Cell-ID,
    maximumDL-PowerCapability
                                               MaximumDL-PowerCapability,
    iE-Extensions
                                               ProtocolExtensionContainer {{ Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}
    OPTIONAL,
    . . .
Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- AUDIT FAILURE
  ******************
AuditFailure ::= SEOUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                       {{AuditFailure-IEs}},
    protocolExtensions
                           ProtocolExtensionContainer {{AuditFailure-Extensions}}
                                                                                           OPTIONAL.
AuditFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-Cause
                                           CRITICALITY ignore
                                                                       TYPE Cause
                                                                                                                       PRESENCE mandatory
```

```
ID id-CriticalityDiagnostics
                                          CRITICALITY ignore
                                                                     TYPE CriticalityDiagnostics
                                                                                                                    PRESENCE optional
AuditFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
      ****************
  COMMON MEASUREMENT INITIATION REQUEST
        CommonMeasurementInitiationRequest ::= SEQUENCE {
                          ProtocolIE-Container
                                                      {{CommonMeasurementInitiationRequest-IEs}},
    protocolIEs
                                                      {{CommonMeasurementInitiationRequest-Extensions}}
   protocolExtensions
                           ProtocolExtensionContainer
                                                                                                                    OPTIONAL,
    . . .
CommonMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                                  CRITICALITY reject TYPE MeasurementID
                                                                                                                    PRESENCE mandatory }
     ID id-CommonMeasurementObjectType-CM-Rqst
                                                                                                                    PRESENCE mandatory
                                                  CRITICALITY reject TYPE CommonMeasurementObjectType-CM-Rqst
     ID id-CommonMeasurementType
                                                  CRITICALITY reject TYPE CommonMeasurementType
                                                                                                                    PRESENCE mandatory }
     ID id-MeasurementFilterCoefficient
                                                  CRITICALITY reject TYPE MeasurementFilterCoefficient
                                                                                                                    PRESENCE optional }
     ID id-ReportCharacteristics
                                                  CRITICALITY reject TYPE ReportCharacteristics
                                                                                                                    PRESENCE mandatory }
                                                  CRITICALITY reject TYPE FNReportingIndicator
                                                                                                                    PRESENCE mandatory }
     ID id-SFNReportingIndicator
                                                                                                                    PRESENCE optional },
     ID id-SFN
                                                  CRITICALITY reject TYPE SFN
CommonMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-CommonMeasurementAccuracy
                                                                                                                           PRESENCE optional } |
                                                          CRITICALITY reject
                                                                              EXTENSION CommonMeasurementAccuracy
     ID id-MeasurementRecovervBehavior
                                                          CRITICALITY ignore
                                                                              EXTENSION MeasurementRecoveryBehavior
                                                                                                                           PRESENCE optional
     ID id-RTWP-ReportingIndicator
                                                          CRITICALITY reject
                                                                              EXTENSION RTWP-ReportingIndicator
                   PRESENCE optional } |
     ID id-RTWP-CellPortion-ReportingIndicator
                                                          CRITICALITY reject
                                                                              EXTENSION RTWP-CellPortion-ReportingIndicator
               PRESENCE optional |
    { ID id-Reference-ReceivedTotalWideBandPowerReporting
                                                          CRITICALITY ignore
                                                                              EXTENSION Reference-ReceivedTotalWideBandPowerReporting
       PRESENCE optional } |
    { ID id-GANSS-Time-ID
                                                          CRITICALITY ignore
                                                                              EXTENSION GANSS-Time-ID
    PRESENCE optional },
    . . .
CommonMeasurementObjectType-CM-Rgst ::= CHOICE {
    cell
                                   Cell-CM-Rqst,
    rACH
                                   RACH-CM-Rast,
   notUsed-cPCH
                                  NULL,
    extension-CommonMeasurementObjectType-CM-Rqst
                                                      Extension-CommonMeasurementObjectType-CM-Rqst
```

```
Extension-CommonMeasurementObjectType-CM-Rgst ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RgstIE }}
Extension-CommonMeasurementObjectType-CM-RgstIE NBAP-PROTOCOL-IES ::= {
     ID id-Power-Local-Cell-Group-choice-CM-Rgst CRITICALITY reject TYPE PowerLocalCellGroup-CM-Rgst
                                                                                                                 PRESENCE mandatory } |
                                                  CRITICALITY reject TYPE ERACH-CM-Rgst
                                                                                                                PRESENCE mandatory
     ID id-ERACH-CM-Rast
       -- FDD only
ERACH-CM-Rgst ::= SEQUENCE {
   c-ID
                                   C-ID,
                                   ProtocolExtensionContainer { { ERACHItem-CM-Rqst-ExtIEs} } OPTIONAL,
   iE-Extensions
ERACHItem-CM-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-CM-Rqst ::= SEQUENCE {
   c-ID
                                   C-ID,
   timeSlot
                                   TimeSlot
                                              OPTIONAL, -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only
                                   ProtocolExtensionContainer { { CellItem-CM-Rqst-ExtIEs} }
   iE-Extensions
                                                                                                                OPTIONAL,
CellItem-CM-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeSlotLCR-CM-Rgst
                                                  CRITICALITY reject EXTENSION TimeSlotLCR
                                                                                                                            PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    {ID id-NeighbouringCellMeasurementInformation
                                                  CRITICALITY ignore EXTENSION NeighbouringCellMeasurementInformation
                                                                                                                            PRESENCE optional }
    {ID id-UARFCNforNt
                                                  CRITICALITY reject EXTENSION UARFON
                                                                                                                            PRESENCE optional }
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies and the requested common measurementype is the one except for "HS-DSCH Required
Power" or "HS-DSCH Provided Bit Rate"
   {ID id-UPPCHPositionLCR
                                                  CRITICALITY reject EXTENSION UPPCHPositionLCR
                                                                                                                            PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
   {ID id-AdditionalTimeSlotListLCR
                                                  CRITICALITY ignore EXTENSION AdditionalTimeSlotListLCR
                                                                                                                            PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only
RACH-CM-Rqst ::= SEQUENCE {
                                   C-ID,
   c-ID
   commonTransportChannelID
                                   CommonTransportChannelID,
                                   iE-Extensions
                                                                                                                OPTIONAL.
RACHItem-CM-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerLocalCellGroup-CM-Rqst ::= SEQUENCE {
   powerLocalCellGroupID
                                  Local-Cell-ID,
```

```
ProtocolExtensionContainer {{ PowerLocalCellGroup-CM-Rqst-ExtIEs }}
    iE-Extensions
                                                                                                                   OPTIONAL,
PowerLocalCellGroup-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  COMMON MEASUREMENT INITIATION RESPONSE
__ **********************
CommonMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                        {{CommonMeasurementInitiationResponse-IEs}},
                           ProtocolExtensionContainer
                                                       {{CommonMeasurementInitiationResponse-Extensions}}
    protocolExtensions
                                                                                                                       OPTIONAL,
CommonMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                                   CRITICALITY ignore
                                                                           TYPE MeasurementID
                                                                                                                       PRESENCE
                                                                                                                                      mandatory
     ID id-CommonMeasurementObjectType-CM-Rsp
                                                    CRITICALITY ignore
                                                                           TYPE CommonMeasurementObjectType-CM-Rsp
                                                                                                                       PRESENCE
                                                                                                                                      optional
                                                    CRITICALITY ignore
                                                                           TYPE SFN
                                                                                                                                      optional
     ID id-SFN
                                                                                                                       PRESENCE
     ID id-CriticalityDiagnostics
                                                    CRITICALITY ignore
                                                                           TYPE CriticalityDiagnostics
                                                                                                                       PRESENCE
                                                                                                                                      optional
CommonMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::=
    { ID id-CommonMeasurementAccuracy
                                                    CRITICALITY ignore
                                                                                                                                      PRESENCE
                                                                           EXTENSION CommonMeasurementAccuracy
optional }
    { ID id-MeasurementRecoverySupportIndicator
                                                   CRITICALITY ignore
                                                                           EXTENSION MeasurementRecoverySupportIndicator
                                                                                                                                      PRESENCE
optional }
     ID id-Reference-ReceivedTotalWideBandPowerSupportIndicator
                                                                               CRITICALITY ignore
                                                                                                                       EXTENSION
                                                                                                                                      Reference-
ReceivedTotalWideBandPowerSupportIndicator
                                               PRESENCE optional } |
     ID id-Reference-ReceivedTotalWideBandPower
                                                                               CRITICALITY ignore
                                                                                                                       EXTENSION
                                                                                                                                      Reference-
ReceivedTotalWideBandPower
                                               PRESENCE optional },
CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
    cell
                                                       Cell-CM-Rsp,
    rACH
                                                       RACH-CM-Rsp,
    notUsed-cPCH
                                                       NULL,
    extension-CommonMeasurementObjectType-CM-Rsp
                                                       Extension-CommonMeasurementObjectType-CM-Rsp
Extension-CommonMeasurementObjectType-CM-Rsp ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RspIE }}
```

756

```
Extension-CommonMeasurementObjectType-CM-RspIE NBAP-PROTOCOL-IES ::= {
     ID id-Power-Local-Cell-Group-choice-CM-Rsp
                                                   CRITICALITY ignore
                                                                           TYPE PowerLocalCellGroup-CM-Rsp
                                                                                                                  PRESENCE mandatory } |
     ID id-ERACH-CM-Rsp
                                                   CRITICALITY ignore
                                                                          TYPE ERACH-CM-Rsp
                                                                                                                  PRESENCE mandatory }
       -- FDD only
ERACH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue
                                   CommonMeasurementValue,
    iE-Extensions
                                   ProtocolExtensionContainer { { ERACHITEM-CM-Rsp-ExtIEs} } OPTIONAL,
ERACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue
                                   CommonMeasurementValue,
                                   ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs} }
    iE-Extensions
                                                                                                                  OPTIONAL,
CellItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-AdditionalMeasurementValueList
                                               CRITICALITY ignore EXTENSION AdditionalMeasurementValueList
                                                                                                                  PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    {ID id-TimeSlotMeasurementValueListLCR CRITICALITY ignore
                                                                   EXTENSION TimeSlotMeasurementValueListLCR
                                                                                                                      PRESENCE optional },
-- Applicable to 1.28Mcps TDD, this IE is for the measurement value from the Primary frequency
RACH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue
                                   CommonMeasurementValue,
                                   ProtocolExtensionContainer { { RACHItem-CM-Rsp-ExtIEs} }
    iE-Extensions
                                                                                                                  OPTIONAL,
    . . .
RACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerLocalCellGroup-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue
                                   CommonMeasurementValue,
                                   ProtocolExtensionContainer {{ PowerLocalCellGroup-CM-Rsp-ExtIEs}}
    iE-Extensions
                                                                                                                      OPTIONAL,
    . . .
PowerLocalCellGroup-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- COMMON MEASUREMENT INITIATION FAILURE
```

```
CommonMeasurementInitiationFailure ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                       {{CommonMeasurementInitiationFailure-IEs}},
                           ProtocolExtensionContainer
                                                       {{CommonMeasurementInitiationFailure-Extensions}}
   protocolExtensions
                                                                                                                      OPTIONAL,
CommonMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                       CRITICALITY ignore
                                                                   TYPE MeasurementID
                                                                                                                  PRESENCE
                                                                                                                             mandatory
     ID id-Cause
                                       CRITICALITY ignore
                                                                   TYPE Cause
                                                                                                                  PRESENCE
                                                                                                                             mandatory
    ID id-CriticalityDiagnostics
                                       CRITICALITY ignore
                                                                   TYPE CriticalityDiagnostics
                                                                                                                  PRESENCE
                                                                                                                             optional
CommonMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- COMMON MEASUREMENT REPORT
__ *********************
CommonMeasurementReport ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                        {{CommonMeasurementReport-IEs}},
                                                      {{CommonMeasurementReport-Extensions}}
                           ProtocolExtensionContainer
    protocolExtensions
                                                                                                                  OPTIONAL,
CommonMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID
                                                   CRITICALITY ignore
                                                                           TYPE MeasurementID
                                                                                                                             PRESENCE
    mandatory } |
    { ID id-CommonMeasurementObjectType-CM-Rprt
                                                   CRITICALITY ignore
                                                                           TYPE CommonMeasurementObjectType-CM-Rprt
                                                                                                                             PRESENCE
    mandatory } |
    { ID id-SFN
                                                   CRITICALITY ignore
                                                                           TYPE SFN
                                                                                                                             PRESENCE
    optional },
    . . .
CommonMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MeasurementRecoveryReportingIndicator
                                                 CRITICALITY ignore
                                                                           EXTENSION MeasurementRecoveryReportingIndicator
                                                                                                                                     PRESENCE
optional }|
    { ID id-Reference-ReceivedTotalWideBandPower
                                                   CRITICALITY ignore
                                                                           EXTENSION Reference-ReceivedTotalWideBandPower
                                                                                                                                     PRESENCE
optional },
CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
    cell
                                                       Cell-CM-Rprt,
    rACH
                                                       RACH-CM-Rprt,
    notUsed-cPCH
                                                       NULL,
```

```
extension-CommonMeasurementObjectType-CM-Rprt
                                                     Extension-CommonMeasurementObjectType-CM-Rprt
Extension-CommonMeasurementObjectType-CM-Rprt ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RprtIE }}
Extension-CommonMeasurementObjectType-CM-RprtIE NBAP-PROTOCOL-IES ::= {
     ID id-Power-Local-Cell-Group-choice-CM-Rprt CRITICALITY ignore
                                                                        TYPE PowerLocalCellGroup-CM-Rprt
                                                                                                              PRESENCE mandatory } |
     ID id-ERACH-CM-Rprt
                                                 CRITICALITY ignore
                                                                        TYPE ERACH-CM-Rprt
                                                                                                              PRESENCE mandatory },
    . . .
ERACH-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation CommonMeasurementValueInformation,
   iE-Extensions
                                      ProtocolExtensionContainer {{ ERACHItem-CM-Rprt-ExtIEs }} OPTIONAL,
ERACHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation
                                     CommonMeasurementValueInformation,
                                      ProtocolExtensionContainer {{ CellItem-CM-Rprt-ExtIEs }}
   iE-Extensions
                                                                                                                  OPTIONAL,
    . . .
CellItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-C-ID
                                         CRITICALITY ignore
                                                                 EXTENSION C-ID
                                                                                           PRESENCE optional | |
    {ID id-AdditionalMeasurementValueList
                                         CRITICALITY ignore
                                                                EXTENSION AdditionalMeasurementValueList
                                                                                                              PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    EXTENSION TimeSlotMeasurementValueListLCR
                                                                                                                  PRESENCE optional },
-- Applicable to 1.28Mcps TDD, this IE is for the measurement value from the Primary frequency
RACH-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation
                                     CommonMeasurementValueInformation,
                                      iE-Extensions
                                                                                                                         OPTIONAL,
    . . .
RACHItem-CM-Rort-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    {ID id-C-ID
                      CRITICALITY ignore
                                                 EXTENSION C-ID
                                                                            PRESENCE optional },
    . . .
PowerLocalCellGroup-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation
                                     CommonMeasurementValueInformation,
                                      ProtocolExtensionContainer {{ PowerLocalCellGroup-CM-Rprt-ExtIEs}}
   iE-Extensions
                                                                                                              OPTIONAL,
```

```
PowerLocalCellGroup-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
  COMMON MEASUREMENT TERMINATION REQUEST
CommonMeasurementTerminationRequest ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                   {{CommonMeasurementTerminationRequest-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer
                                                  {{CommonMeasurementTerminationRequest-Extensions}}
                                                                                                             OPTIONAL,
CommonMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-MeasurementID
                                CRITICALITY ignore
                                                              TYPE MeasurementID
                                                                                       PRESENCE mandatory },
CommonMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- COMMON MEASUREMENT FAILURE INDICATION
__ **********************
CommonMeasurementFailureIndication ::= SEQUENCE
   protocolIEs
                            ProtocolIE-Container
                                                       {CommonMeasurementFailureIndication-IEs}},
   protocolExtensions
                            ProtocolExtensionContainer {{CommonMeasurementFailureIndication-Extensions}}
                                                                                                                           OPTIONAL.
CommonMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                CRITICALITY ignore
                                                          TYPE MeasurementID
                                                                                    PRESENCE mandatory } |
   { ID id-Cause
                                CRITICALITY ignore
                                                                                   PRESENCE mandatory },
                                                          TYPE Cause
CommonMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- CELL SETUP REQUEST FDD
  ******************
```

```
CellSetupRequestFDD ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                        {{CellSetupRequestFDD-IEs}},
                                                        {{CellSetupRequestFDD-Extensions}}
    protocolExtensions
                            ProtocolExtensionContainer
                                                                                                OPTIONAL.
CellSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-ID
                                                                CRITICALITY reject TYPE Local-Cell-ID
    PRESENCE mandatory } |
    { ID id-C-ID
                                                                CRITICALITY reject TYPE C-ID
    PRESENCE mandatory } |
    { ID id-ConfigurationGenerationID
                                                                CRITICALITY reject TYPE ConfigurationGenerationID
    PRESENCE mandatory } |
    { ID id-T-Cell
                                                                CRITICALITY reject TYPE T-Cell
    PRESENCE mandatory } |
    { ID id-UARFCNforNu
                                                                CRITICALITY reject TYPE UARFON
    PRESENCE mandatory } |
    { ID id-UARFCNforNd
                                                                CRITICALITY reject TYPE UARFON
    PRESENCE mandatory } |
    { ID id-MaximumTransmissionPower
                                                                CRITICALITY reject TYPE MaximumTransmissionPower
    PRESENCE mandatory } |
    { ID id-Closed-Loop-Timing-Adjustment-Mode
                                                                CRITICALITY reject TYPE Closedlooptimingadjustmentmode
                                                                                                                                       PRESENCE
optional }|
    { ID id-PrimaryScramblingCode
                                                                CRITICALITY reject TYPE PrimaryScramblingCode
    PRESENCE mandatory }
    { ID id-Synchronisation-Configuration-Cell-SetupRqst
                                                                CRITICALITY reject TYPE Synchronisation-Configuration-Cell-SetupRqst
    PRESENCE
               mandatory }
    { ID id-DL-TPC-Pattern01Count
                                                                CRITICALITY reject TYPE DL-TPC-Pattern01Count
    PRESENCE mandatory } |
                                                                CRITICALITY reject TYPE PrimarySCH-Information-Cell-SetupRqstFDD
    { ID id-PrimarySCH-Information-Cell-SetupRqstFDD
        PRESENCE
                   mandatory } |
    { ID id-SecondarySCH-Information-Cell-SetupRgstFDD
                                                                CRITICALITY reject TYPE SecondarySCH-Information-Cell-SetupRqstFDD
    PRESENCE mandatory } |
    { ID id-PrimaryCPICH-Information-Cell-SetupRgstFDD
                                                                CRITICALITY reject TYPE PrimaryCPICH-Information-Cell-SetupRqstFDD
    PRESENCE
                mandatory }
    { ID id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD
                                                                CRITICALITY reject TYPE SecondaryCPICH-InformationList-Cell-SetupRqstFDD
    PRESENCE
               optional }
    { ID id-PrimaryCCPCH-Information-Cell-SetupRgstFDD
                                                                CRITICALITY reject TYPE PrimaryCCPCH-Information-Cell-SetupRqstFDD
    PRESENCE
                mandatory }
    { ID id-Limited-power-increase-information-Cell-SetupRqstFDD
                                                                    CRITICALITY reject TYPE Limited-power-increase-information-Cell-SetupRqstFDD
        PRESENCE mandatory },
CellSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::=
    { ID id-IPDLParameter-Information-Cell-SetupRqstFDD
                                                            CRITICALITY reject EXTENSION IPDLParameter-Information-Cell-SetupRgstFDD
       PRESENCE optional }
    { ID id-CellPortion-InformationList-Cell-SetupRgstFDD
                                                            CRITICALITY reject EXTENSION CellPortion-InformationList-Cell-SetupRqstFDD
        PRESENCE optional }
     ID id-MIMO-PilotConfiguration
                                                            CRITICALITY reject EXTENSION MIMO-PilotConfiguration
                                                                                                                                PRESENCE optional }
     ID id-MIMO-PilotConfigurationExtension
                                                            CRITICALITY reject EXTENSION MIMO-PilotConfigurationExtension
                            PRESENCE optional },
```

```
Synchronisation-Configuration-Cell-SetupRqst ::= SEOUENCE {
    n-INSYNC-IND
                           N-INSYNC-IND.
   n-OUTSYNC-IND
                            N-OUTSYNC-IND,
    t-RLFAILURE
                           T-RLFAILURE.
                            ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-SetupRqst-ExtIEs} }
    iE-Extensions
                                                                                                                         OPTIONAL,
Synchronisation-Configuration-Cell-SetupRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    primarySCH-Power
                                            DL-Power,
    tSTD-Indicator
                                            TSTD-Indicator,
                                            ProtocolExtensionContainer { { PrimarySCH-Information-Cell-SetupRgstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    secondarySCH-Power
                                            DL-Power,
    tSTD-Indicator
                                            TSTD-Indicator,
                                            ProtocolExtensionContainer { { SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCPICH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
                                            CommonPhysicalChannelID,
    commonPhysicalChannelID
    primaryCPICH-Power
                                            PrimaryCPICH-Power,
    transmitDiversityIndicator
                                            TransmitDiversityIndicator,
                                            ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondaryCPICH-InformationList-Cell-SetupRgstFDD ::= SEOUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container { SecondaryCPICH-
InformationItemIE-Cell-SetupRqstFDD }}
SecondaryCPICH-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
```

```
{ ID id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD
                                                                     CRITICALITY reject TYPE SecondaryCPICH-InformationItem-Cell-SetupRqstFDD
    PRESENCE mandatory }
SecondaryCPICH-InformationItem-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    dl-ScramblingCode
                                            DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber
                                            FDD-DL-ChannelisationCodeNumber.
    secondaryCPICH-Power
                                            DI-Power.
    transmitDiversityIndicator
                                            TransmitDiversityIndicator,
                                            ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
SecondaryCPICH-InformationItem-Cell-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCCPCH-Information-Cell-SetupRqstFDD ::= SEQUENCE
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    bCH-information
                                            BCH-Information-Cell-SetupRqstFDD,
    sTTD-Indicator
                                            STTD-Indicator,
                                            ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                                         OPTIONAL,
PrimaryCCPCH-Information-Cell-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID
                                            CommonTransportChannelID,
   bCH-Power
                                            DL-Power,
                                            ProtocolExtensionContainer { { BCH-Information-Cell-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
BCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Limited-power-increase-information-Cell-SetupRqstFDD ::= SEQUENCE {
    powerRaiseLimit
                                            PowerRaiseLimit,
    dLPowerAveragingWindowSize
                                            DLPowerAveragingWindowSize,
    iE-Extensions
                                            ProtocolExtensionContainer { { Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs} }
    OPTIONAL,
Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
IPDLParameter-Information-Cell-SetupRqstFDD::= SEQUENCE {
   iPDL-FDD-Parameters
                                      IPDL-FDD-Parameters,
   iPDL-Indicator
                                      IPDL-Indicator.
   iE-Extensions
                                      ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRgstFDD-ExtIEs} }
   OPTIONAL,
   . . .
IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellPortion-InformationList-Cell-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF ProtocolIE-Single-Container{{ CellPortion-
InformationItemIE-Cell-SetupRgstFDD }}
CellPortion-InformationItemIE-Cell-SetupRgstFDD NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
CellPortion-InformationItem-Cell-SetupRqstFDD::= SEQUENCE {
   cellPortionID
                                      CellPortionID,
   associatedSecondaryCPICH
                                      CommonPhysicalChannelID,
   maximumTransmissionPowerforCellPortion MaximumTransmissionPower.
   iE-Extensions
                                      ProtocolExtensionContainer { { CellPortion-InformationItem-Cell-SetupRqstFDD-ExtIEs} }
   OPTIONAL,
   . . .
CellPortion-InformationItem-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
__ ********************************
-- CELL SETUP REQUEST TDD
CellSetupRequestTDD ::= SEQUENCE {
                                                  {{CellSetupRequestTDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{CellSetupRequestTDD-Extensions}}
   protocolExtensions
                                                                                     OPTIONAL,
CellSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-Local-Cell-ID
                                                     CRITICALITY reject TYPE Local-Cell-ID
   PRESENCE mandatory } |
   { ID id-C-ID
                                                     CRITICALITY reject TYPE C-ID
   PRESENCE mandatory } |
   { ID id-ConfigurationGenerationID
                                                     CRITICALITY reject TYPE ConfigurationGenerationID
   PRESENCE mandatory } |
```

```
{ ID id-UARFCNforNt
                                                           CRITICALITY reject TYPE UARFON
    PRESENCE mandatory } -- For 1.28Mcps TDD, if multiple frequencies exist within the cell indicated by C-ID, this IE indicates the frequency
of Primary frequency
    { ID id-CellParameterID
                                                           CRITICALITY reject TYPE CellParameterID
    PRESENCE mandatory } |
    -- For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, this IE indicate the Preamble code used in the Speial Time Slot [19]
    { ID id-MaximumTransmissionPower
                                                           CRITICALITY reject TYPE MaximumTransmissionPower
    PRESENCE mandatory } |
    { ID id-TransmissionDiversityApplied
                                                           CRITICALITY reject TYPE TransmissionDiversityApplied
    PRESENCE mandatory } |
    { ID id-SyncCase
                                                           CRITICALITY reject TYPE SyncCase
    PRESENCE mandatory }
    { ID id-Synchronisation-Configuration-Cell-SetupRgst
                                                           CRITICALITY reject TYPE Synchronisation-Configuration-Cell-SetupRqst
                                                                                                                                      PRESENCE
mandatory }|
    { ID id-DPCHConstant
                                                           CRITICALITY reject TYPE ConstantValue
    PRESENCE mandatory } |
                           -- This IE shall be ignored by the Node B.
    { ID id-PUSCHConstant
                                                           CRITICALITY reject TYPE ConstantValue
    PRESENCE mandatory } |
                           -- This IE shall be ignored by the Node B.
    { ID id-PRACHConstant
                                                           CRITICALITY reject TYPE ConstantValue
    PRESENCE mandatory } -- This IE shall be ignored by the Node B.
    { ID id-TimingAdvanceApplied
                                                           CRITICALITY reject TYPE TimingAdvanceApplied
    PRESENCE mandatory } |
    { ID id-SCH-Information-Cell-SetupRqstTDD
                                                           CRITICALITY reject TYPE SCH-Information-Cell-SetupRqstTDD
    PRESENCE optional }
                         -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, Not Applicable to 1.28Mcps TDD
    { ID id-PCCPCH-Information-Cell-SetupRqstTDD
                                                           CRITICALITY reject TYPE PCCPCH-Information-Cell-SetupRqstTDD
    PRESENCE optional }
                          -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD
    { ID id-TimeSlotConfigurationList-Cell-SetupRgstTDD
                                                           CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-SetupRqstTDD
                                                                                                                                      PRESENCE
optional }, -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, Not Applicable to 1.28Mcps TDD
CellSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD
                                                               CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD
    PRESENCE optional } -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD. If multiple frequencies exist within the
cell indicated by C-ID, this IE indicates the Time Slot configuration of Primary frequency.
    { ID id-PCCPCH-LCR-Information-Cell-SetupRqstTDD
                                                               CRITICALITY reject EXTENSION PCCPCH-LCR-Information-Cell-SetupRqstTDD
        PRESENCE optional } -- Mandatory for 1.28 Mcps TDD, Not Applicable to 3.84 Mcps TDD or 7.68 Mcps TDD, For 1.28 Mcps TDD, if the cell is
operating in MBSFN only mode, PCCPCH is deployed on the MBSFN Special Time Slot [19].
    { ID id-DwPCH-LCR-Information-Cell-SetupRgstTDD
                                                               CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-SetupRgstTDD
        PRESENCE optional }
                               -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    { ID id-ReferenceSFNoffset
                                                               CRITICALITY ignore EXTENSION ReferenceSFNoffset
                   PRESENCE optional }
    { ID id-IPDLParameter-Information-Cell-SetupRqstTDD
                                                               CRITICALITY reject EXTENSION IPDLParameter-Information-Cell-SetupRqstTDD
        PRESENCE optional } -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only
     ID id-IPDLParameter-Information-LCR-Cell-SetupRgstTDD
                                                               CRITICALITY reject EXTENSION IPDLParameter-Information-LCR-Cell-SetupRgstTDD
    PRESENCE optional } |
                         -- Applicable to 1.28Mcps TDD only
    { ID id-PCCPCH-768-Information-Cell-SetupRgstTDD
                                                               CRITICALITY reject EXTENSION PCCPCH-768-Information-Cell-SetupRgstTDD
        PRESENCE optional } -- Mandatory for 7.68Mcps TDD, Not Applicable to 3.84Mcps TDD or 1.28Mcps TDD
    { ID id-SCH-768-Information-Cell-SetupRqstTDD
                                                               CRITICALITY reject EXTENSION SCH-768-Information-Cell-SetupRqstTDD
        PRESENCE optional } -- Mandatory for 7.68Mcps TDD, Not Applicable to 3.84Mcps TDD or 1.28Mcps TDD
    { ID id-MBSFN-Only-Mode-Indicator-Cell-SetupRgstTDD-LCR
                                                               CRITICALITY reject EXTENSION MBSFN-Only-Mode-Indicator
                   PRESENCE optional }
    { ID id-Cell-Frequency-List-LCR-MulFreq-Cell-SetupRqstTDD CRITICALITY reject EXTENSION Cell-Frequency-List-LCR-MulFreq-Cell-SetupRqstTDD
       PRESENCE optional }, -- Mandatory for 1.28Mcps TDD when using multiple frequencies
```

```
SCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                      CommonPhysicalChannelID,
   syncCaseIndicator
                                      SyncCaseIndicator-Cell-SetupRgstTDD-PSCH,
   sCH-Power
                                      DL-Power,
   tSTD-Indicator
                                      TSTD-Indicator,
   iE-Extensions
                                      ProtocolExtensionContainer { { SCH-Information-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                OPTIONAL,
SCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SyncCaseIndicator-Cell-SetupRgstTDD-PSCH ::= ProtocolIE-Single-Container {{ SyncCaseIndicatorIE-Cell-SetupRgstTDD-PSCH }}
SyncCaseIndicatorIE-Cell-SetupRgstTDD-PSCH NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH ::= CHOICE
   case1
                                   Case1-Cell-SetupRqstTDD,
   case2
                                   Case2-Cell-SetupRqstTDD,
   . . .
Case1-Cell-SetupRqstTDD ::= SEQUENCE {
   timeSlot
   iE-Extensions
                                   ProtocolExtensionContainer { CaselItem-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                          OPTIONAL,
   . . .
Case1Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Case2-Cell-SetupRqstTDD ::= SEQUENCE {
   sCH-TimeSlot
                                   SCH-TimeSlot,
                                   iE-Extensions
                                                                                                          OPTIONAL,
Case2Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                      CommonPhysicalChannelID,
   tdd-PhysicalChannelOffset
                                      TDD-PhysicalChannelOffset,
   repetitionPeriod
                                      RepetitionPeriod,
                                      RepetitionLength,
   repetitionLength
```

```
pCCPCH-Power
                                            PCCPCH-Power,
    sCTD-Indicator
                                            SCTD-Indicator.
    iE-Extensions
                                            ProtocolExtensionContainer { { PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                                         OPTIONAL.
PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-SetupRqstTDD
TimeSlotConfigurationItem-Cell-SetupRgstTDD ::= SEQUENCE {
    timeSlot
                                            TimeSlot.
    timeSlotStatus
                                            TimeSlotStatus,
    timeSlotDirection
                                            TimeSlotDirection,
                                            ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MBSFN-Cell-ParameterID-Cell-SetupRqstTDD
                                                                                                                          PRESENCE optional }, --
                                                                CRITICALITY reject EXTENSION CellParameterID
Applicable only to for MBSFN only mode
TimeSlotConfigurationList-LCR-Cell-SetupRgstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-SetupRgstTDD
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    timeSlotStatus
                                            TimeSlotStatus,
    timeSlotDirection
                                            TimeSlotDirection,
                                            ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Time-Slot-Parameter-ID
                                                            CRITICALITY reject
                                                                                         EXTENSION CellParameterID
                                                                                                                                         PRESENCE
optional },
PCCPCH-LCR-Information-Cell-SetupRgstTDD ::= SEOUENCE
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    pCCPCH-Power
                                            PCCPCH-Power,
                                            SCTD-Indicator,
    sCTD-Indicator
    tSTD-Indicator
                                            TSTD-Indicator,
    iE-Extensions
                                            ProtocolExtensionContainer { { PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                                         OPTIONAL,
```

```
PCCPCH-LCR-Information-Cell-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DwPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelId CommonPhysicalChannelID,
    tSTD-Indicator
                                    TSTD-Indicator,
    dwPCH-Power
                                    DwPCH-Power,
    iE-Extensions
                                    ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                                OPTIONAL,
    . . .
DwPCH-LCR-Information-Cell-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-Cell-SetupRgstTDD ::= SEQUENCE {
    iPDL-TDD-Parameters
                                            IPDL-TDD-Parameters,
    iPDL-Indicator
                                            IPDL-Indicator,
   iE-Extensions
                                            ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
    . . .
IPDLParameter-Information-Cell-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
    iPDL-TDD-Parameters-LCR
                                            IPDL-TDD-Parameters-LCR,
   iPDL-Indicator
                                            IPDL-Indicator,
   iE-Extensions
                                            ProtocolExtensionContainer { { IPDLParameter-Information-LCR-Cell-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
IPDLParameter-Information-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-768-Information-Cell-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                            CommonPhysicalChannelID768,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    pCCPCH-Power
                                            PCCPCH-Power,
    sCTD-Indicator
                                            SCTD-Indicator,
                                            ProtocolExtensionContainer { { PCCPCH-768-Information-Cell-SetupRgstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                        OPTIONAL,
PCCPCH-768-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
SCH-768-Information-Cell-SetupRqstTDD ::= SEQUENCE
   commonPhysicalChannelID768
                                        CommonPhysicalChannelID768,
   syncCaseIndicator
                                        SyncCaseIndicator-Cell-SetupRgstTDD-PSCH,
   sCH-Power
                                        DL-Power,
   tSTD-Indicator
                                        TSTD-Indicator,
                                        iE-Extensions
                                                                                                                           OPTIONAL,
SCH-768-Information-Cell-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-Frequency-List-LCR-MulFreq-Cell-SetupRgstTDD ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF Cell-Frequency-Item-LCR-MulFreq-Cell-
SetupRastTDD
Cell-Frequency-Item-LCR-MulFreq-Cell-SetupRqstTDD ::= SEQUENCE
   uARFCN
                                                       UARFCN,
   -- This IE indicates the frequency of Secondary frequency
   timeSlotConfigurationList-LCR-Cell-SetupRgstTDD
                                                      TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
   -- This IE indicates the Time Slot configuration of Secondary frequency
                                        ProtocolExtensionContainer { { Cell-Frequency-Item-LCR-MulFreq-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
Cell-Frequency-Item-LCR-MulFreq-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
__ *******************************
-- CELL SETUP RESPONSE
__ *********************
CellSetupResponse ::= SEQUENCE {
                                                       {{CellSetupResponse-IEs}},
   protocolIEs
                             ProtocolIE-Container
                             ProtocolExtensionContainer {{CellSetupResponse-Extensions}}
   protocolExtensions
                                                                                                          OPTIONAL,
CellSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                    CRITICALITY ignore
                                                              TYPE CriticalityDiagnostics
                                                                                                          PRESENCE optional },
   . . .
CellSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
__ ******************
  CELL SETUP FAILURE
  CellSetupFailure ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                    {{CellSetupFailure-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{CellSetupFailure-Extensions}}
                                                                                        OPTIONAL,
CellSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Cause
                                        CRITICALITY ignore
                                                                  TYPE Cause
                                                                                                              PRESENCE mandatory
   ID id-CriticalityDiagnostics
                                        CRITICALITY ignore
                                                                  TYPE CriticalityDiagnostics
                                                                                                              PRESENCE optional
CellSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- CELL RECONFIGURATION REQUEST FDD
__ *********************
CellReconfigurationRequestFDD ::= SEQUENCE {
                ProtocolIE-Container
                                                    {{CellReconfigurationRequestFDD-IEs}},
   protocolIEs
                      ProtocolExtensionContainer {{CellReconfigurationRequestFDD-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
CellReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID
                                                              CRITICALITY reject TYPE C-ID
                         PRESENCE mandatory }
          id-ConfigurationGenerationID
                                                              CRITICALITY reject TYPE ConfigurationGenerationID
                  PRESENCE mandatory } |
           id-MaximumTransmissionPower
                                                              CRITICALITY reject TYPE MaximumTransmissionPower
                  PRESENCE optional }
   { ID
          id-Synchronisation-Configuration-Cell-ReconfRqst
                                                              CRITICALITY reject TYPE Synchronisation-Configuration-Cell-ReconfRqst
   PRESENCE optional } |
          id-PrimarySCH-Information-Cell-ReconfRqstFDD
                                                              CRITICALITY reject TYPE PrimarySCH-Information-Cell-ReconfRqstFDD
   PRESENCE optional } |
   { ID id-SecondarySCH-Information-Cell-ReconfRqstFDD
                                                              CRITICALITY reject TYPE SecondarySCH-Information-Cell-ReconfRqstFDD
       PRESENCE optional }
    { ID id-PrimaryCPICH-Information-Cell-ReconfRqstFDD
                                                              CRITICALITY reject TYPE PrimaryCPICH-Information-Cell-ReconfRqstFDD
       PRESENCE optional } |
          id-SecondaryCPICH-InformationList-Cell-ReconfRgstFDD
                                                              CRITICALITY reject TYPE SecondaryCPICH-InformationList-Cell-ReconfRqstFDD
   PRESENCE optional } |
   { ID id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD
                                                              CRITICALITY reject TYPE PrimaryCCPCH-Information-Cell-ReconfRqstFDD
       PRESENCE optional },
   . . .
```

```
CellReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
          id-IPDLParameter-Information-Cell-ReconfRqstFDD CRITICALITY reject EXTENSION IPDLParameter-Information-Cell-ReconfRqstFDD
           PRESENCE optional }
   PRESENCE optional } |
   { ID id-MIMO-PilotConfiguration
                                                        CRITICALITY reject EXTENSION MIMO-PilotConfiguration
                  PRESENCE optional }
    { ID id-MIMO-PilotConfigurationExtension
                                                        CRITICALITY reject EXTENSION MIMO-PilotConfigurationExtension
                          PRESENCE optional },
    . . .
Synchronisation-Configuration-Cell-ReconfRqst ::= SEQUENCE {
   n-INSYNC-IND
                    N-INSYNC-IND,
                         N-OUTSYNC-IND,
   n-OUTSYNC-IND
                         T-RLFAILURE,
   t-RLFAILURE
                         ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                OPTIONAL,
Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
PrimarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                         CommonPhysicalChannelID,
   primarySCH-Power
                                         DL-Power,
   iE-Extensions
                                         ProtocolExtensionContainer { { PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs} }
                                                                                                                              OPTIONAL,
   . . .
PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                         CommonPhysicalChannelID,
   secondarySCH-Power
                                         DL-Power,
                                         ProtocolExtensionContainer { { SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCPICH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
                                         CommonPhysicalChannelID,
   commonPhysicalChannelID
   primaryCPICH-Power
                                         PrimaryCPICH-Power,
   iE-Extensions
                                         ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs} }
   OPTIONAL,
```

```
PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondaryCPICH-InformationList-Cell-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ SecondaryCPICH-
InformationItemIE-Cell-ReconfRqstFDD }}
SecondaryCPICH-InformationItemIE-Cell-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
SecondaryCPICH-InformationItem-Cell-ReconfRgstFDD ::= SEQUENCE
   commonPhysicalChannelID
                                      CommonPhysicalChannelID,
   secondaryCPICH-Power
                                      DL-Power,
                                      ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-ReconfRgstFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCCPCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
                                      BCH-information-Cell-ReconfRgstFDD,
   bCH-information
   iE-Extensions
                                      ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs} }
   OPTIONAL,
PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BCH-information-Cell-ReconfRqstFDD ::= SEQUENCE {
   commonTransportChannelID
                                      CommonTransportChannelID,
   bCH-Power
                                      DL-Power,
                                      iE-Extensions
                                                                                                                OPTIONAL,
BCH-information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-Cell-ReconfRqstFDD::= SEQUENCE {
   iPDL-FDD-Parameters
                                          IPDL-FDD-Parameters
                                                               OPTIONAL,
   iPDL-Indicator
                                          IPDL-Indicator,
   iE-Extensions
                                      ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs} }
   OPTIONAL,
```

```
IPDLParameter-Information-Cell-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellPortion-InformationList-Cell-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF ProtocolIE-Single-Container{{ CellPortion-
InformationItemIE-Cell-ReconfRqstFDD }}
CellPortion-InformationItemIE-Cell-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
   PRESENCE
                     mandatory }
CellPortion-InformationItem-Cell-ReconfRqstFDD::= SEQUENCE {
                                       CellPortionID,
   cellPortionID
   maximumTransmissionPowerforCellPortion MaximumTransmissionPower,
                                       ProtocolExtensionContainer { CellPortion-InformationItem-Cell-ReconfRgstFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
CellPortion-InformationItem-Cell-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- CELL RECONFIGURATION REQUEST TDD
__ *********************
CellReconfigurationRequestTDD ::= SEQUENCE {
                                                  {{CellReconfigurationRequestTDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{CellReconfigurationRequestTDD-Extensions}}
   protocolExtensions
                                                                                                           OPTIONAL,
CellReconfigurationRequestTDD-IES NBAP-PROTOCOL-IES ::= {
   { ID id-C-ID
                                                      CRITICALITY reject TYPE C-ID
                                                                                                                         PRESENCE
mandatory } |
   { ID id-ConfigurationGenerationID
                                                      CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                                         PRESENCE
mandatory }
   { ID id-Synchronisation-Configuration-Cell-ReconfRqst
                                                     CRITICALITY reject TYPE Synchronisation-Configuration-Cell-ReconfRqst
   PRESENCE optional }
   { ID id-TimingAdvanceApplied
                                                      CRITICALITY reject TYPE TimingAdvanceApplied
                                                                                                                         PRESENCE
optional }|
   { ID id-SCH-Information-Cell-ReconfRqstTDD
                                                     CRITICALITY reject TYPE SCH-Information-Cell-ReconfRqstTDD
                                                                                                                  PRESENCE optional } |
   -- Applicable to 3.84Mcps TDD only
   { ID id-PCCPCH-Information-Cell-ReconfRqstTDD
                                                     CRITICALITY reject TYPE PCCPCH-Information-Cell-ReconfRqstTDD
                                                                                                                  PRESENCE optional }
   -- Not applicable to 7.68Mcps TDD only. For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, PCCPCH is deployed on the MBSFN Special
Time Slot [19].
```

```
{ ID id-MaximumTransmissionPower
                                                     CRITICALITY reject TYPE MaximumTransmissionPower
                                                                                                                        PRESENCE
optional }|
   { ID id-DPCHConstant
                                                     CRITICALITY reject TYPE ConstantValue
                                                                                                                        PRESENCE
optional }|
   -- This IE shall be ignored by the Node B.
   { ID id-PUSCHConstant
                                                     CRITICALITY reject TYPE ConstantValue
                                                                                                                        PRESENCE
optional }|
   -- This IE shall be ignored by the Node B.
   { ID id-PRACHConstant
                                                     CRITICALITY reject TYPE ConstantValue
                                                                                                                        PRESENCE
optional }|
   -- This IE shall be ignored by the Node B.
   PRESENCE optional },
   -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD only. Not Applicable to 1.28Mcps TDD.
CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
         id-TimeSlotConfigurationList-LCR-Cell-ReconfRgstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-Cell-ReconfRgstTDD
   PRESENCE optional }
                      -- Applicable to 1.28Mcps TDD only, If multiple frequencies exist within the cell indicated by C-ID, this IE indicates
the Time Slot reconfiguration of Primary frequency
   { ID id-DwPCH-LCR-Information-Cell-ReconfRqstTDD
                                                        CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-ReconfRqstTDD
   PRESENCE optional } -- Applicable to 1.28Mcps TDD only
   { ID id-IPDLParameter-Information-Cell-ReconfRgstTDD
                                                        CRITICALITY reject EXTENSION IPDLParameter-Information-Cell-ReconfRgstTDD
   PRESENCE optional } -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only
   { ID id-IPDLParameter-Information-LCR-Cell-ReconfRgstTDD CRITICALITY reject EXTENSION IPDLParameter-Information-LCR-Cell-ReconfRgstTDD
   PRESENCE optional } -- Applicable to 1.28Mcps TDD only
   { ID id-SCH-768-Information-Cell-ReconfRgstTDD
                                                        CRITICALITY reject EXTENSION SCH-768-Information-Cell-ReconfRgstTDD
       PRESENCE optional } -- Applicable to 7.68Mcps TDD only
   { ID id-PCCPCH-768-Information-Cell-ReconfRqstTDD
                                                        CRITICALITY reject EXTENSION PCCPCH-768-Information-Cell-ReconfRgstTDD
       PRESENCE optional } -- Applicable to 7.68Mcps TDD only
   { ID id-UARFCN-Adjustment
                                                        CRITICALITY reject EXTENSION UARFCN-Adjustment
                 PRESENCE optional }, -- Applicable to 1.28Mcps TDD when using multiple frequencies
SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                       CommonPhysicalChannelID,
   sCH-Power
                                       DL-Power,
   iE-Extensions
                                       OPTIONAL,
PSCH-Information-Cell-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                      CommonPhysicalChannelID,
   pCCPCH-Power
                                       PCCPCH-Power,
   iE-Extensions
                                       OPTIONAL,
```

```
PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-Cell-ReconfRgstTDD ::= SEOUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRgstTDD
TimeSlotConfigurationItem-Cell-ReconfRgstTDD ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    timeSlotStatus
                                            TimeSlotStatus,
    timeSlotDirection
                                            TimeSlotDirection,
                                            ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MBSFN-Cell-ParameterID-Cell-ReconfRgstTDD
                                                                                                                         PRESENCE optional },
                                                                CRITICALITY reject EXTENSION CellParameterID
TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD
TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    timeSlotStatus
                                            TimeSlotStatus,
    timeSlotDirection
                                            TimeSlotDirection,
                                            ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-ReconfRgstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DwPCH-LCR-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelId
                                            CommonPhysicalChannelID,
    dwPCH-Power
                                            DwPCH-Power,
    iE-Extensions
                                            ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs} }
                                                                                                                                        OPTIONAL,
DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-Cell-ReconfRqstTDD ::= SEQUENCE
    iPDL-TDD-Parameters
                                            IPDL-TDD-Parameters
                                                                    OPTIONAL,
    iPDL-Indicator
                                            IPDL-Indicator,
   iE-Extensions
                                            ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs} }
    OPTIONAL,
    . . .
```

```
IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-LCR-Cell-ReconfRgstTDD ::= SEQUENCE {
    iPDL-TDD-Parameters-LCR
                                            IPDL-TDD-Parameters-LCR
                                                                         OPTIONAL,
    iPDL-Indicator
                                            IPDL-Indicator,
   iE-Extensions
                                            ProtocolExtensionContainer { { IPDLParameter-Information-LCR-Cell-ReconfRqstTDD-ExtIEs} }
   OPTIONAL,
    . . .
IPDLParameter-Information-LCR-Cell-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SCH-768-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                            CommonPhysicalChannelID768,
    sCH-Power
                                            DL-Power,
                                            ProtocolExtensionContainer { { PSCH-768-Information-Cell-ReconfRgstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                        OPTIONAL,
PSCH-768-Information-Cell-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-768-Information-Cell-ReconfRgstTDD ::= SEQUENCE {
                                            CommonPhysicalChannelID768,
    commonPhysicalChannelID768
    pCCPCH-Power
                                            PCCPCH-Power,
   iE-Extensions
                                            ProtocolExtensionContainer { { PCCPCH-768-Information-Cell-ReconfRqstTDD-ExtIEs} }
                                                                                                                                        OPTIONAL,
PCCPCH-768-Information-Cell-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UARFCN-Adjustment::= CHOICE {
    cell-Frequency-Add-LCR-MulFreq-Cell-ReconfRgstTDD
                                                                    Cell-Frequency-Add-LCR-MulFreg-Cell-ReconfRgstTDD,
                                                                    Cell-Frequency-ModifyList-LCR-MulFreq-Cell-ReconfRqstTDD,
    cell-Frequency-ModifyList-LCR-MulFreq-Cell-ReconfRqstTDD
    cell-Frequency-Delete-LCR-MulFreq-Cell-ReconfRqstTDD
                                                                    Cell-Frequency-Delete-LCR-MulFreq-Cell-ReconfRqstTDD,
    . . .
Cell-Frequency-Add-LCR-MulFreq-Cell-ReconfRqstTDD ::= SEQUENCE
    uARFCN
                                                            UARFCN.
    -- This IE indicates the frequency of Secondary frequency to add
    timeSlotConfigurationList-LCR-Cell-ReconfRqstTDD
                                                            TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
    -- This IE indicates the Time Slot configuration of Secondary frequency to add
                                            ProtocolExtensionContainer { Cell-Frequency-Add-LCR-MulFreq-Cell-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
```

```
Cell-Frequency-Add-LCR-MulFreq-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-Frequency-ModifyList-LCR-MulFreq-Cell-ReconfRgstTDD ::= SEOUENCE (SIZE (1..maxFrequencyinCell-1)) OF Cell-Frequency-ModifyItem-LCR-MulFreq-
Cell-ReconfRastTDD
Cell-Frequency-ModifyItem-LCR-MulFreq-Cell-ReconfRqstTDD ::= SEQUENCE
    -- This IE indicates the frequency of Secondary frequency to modify
    timeSlotConfigurationList-LCR-Cell-ReconfRqstTDD
                                                        TimeSlotConfigurationList-LCR-Cell-ReconfRgstTDD,
    -- This IE indicates the Time Slot reconfiguration of Secondary frequency
   iE-Extensions
                                          ProtocolExtensionContainer { { Cell-Frequency-ModifyItem-LCR-MulFreq-Cell-ReconfRqstTDD-ExtIEs} }
   OPTIONAL,
Cell-Frequency-ModifyItem-LCR-MulFreq-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-Frequency-Delete-LCR-MulFreq-Cell-ReconfRqstTDD ::= SEQUENCE {
   -- This IE indicates the frequency of Secondary Frequency to delete
   iE-Extensions
                                         ProtocolExtensionContainer { { Cell-Frequency-Delete-LCR-MulFreq-Cell-ReconfRqstTDD-ExtIEs} }
   OPTIONAL,
    . . .
Cell-Frequency-Delete-LCR-MulFreq-Cell-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   ******************
-- CELL RECONFIGURATION RESPONSE
__ *********************
CellReconfigurationResponse ::= SEQUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                          {{CellReconfigurationResponse-IEs}},
                           ProtocolExtensionContainer {{CellReconfigurationResponse-Extensions}}
   protocolExtensions
                                                                                                                  OPTIONAL,
CellReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CriticalityDiagnostics
                                     CRITICALITY ignore
                                                                TYPE CriticalityDiagnostics
                                                                                                              PRESENCE optional },
CellReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

OPTIONAL,

PRESENCE mandatory

PRESENCE optional

```
-- CELL RECONFIGURATION FAILURE
__ *********************
CellReconfigurationFailure ::= SEQUENCE {
   protocolIEs
               ProtocolIE-Container
                                                {{CellReconfigurationFailure-IEs}},
                     ProtocolExtensionContainer {{CellReconfigurationFailure-Extensions}}
   protocolExtensions
CellReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Cause
                                 CRITICALITY ignore
                                                         TYPE Cause
   { ID id-CriticalityDiagnostics
                                 CRITICALITY ignore
                                                         TYPE CriticalityDiagnostics
   . . .
CellReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- CELL DELETION REQUEST
  CellDeletionRequest ::= SEQUENCE {
   protocolIEs
                                               {{CellDeletionRequest-IEs}},
                       ProtocolIE-Container
   protocolExtensions
                       ProtocolExtensionContainer {{CellDeletionRequest-Extensions}}
                                                                                 OPTIONAL,
   . . .
CellDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-C-ID
                       CRITICALITY reject
                                               TYPE C-ID
                                                             PRESENCE mandatory },
   . . .
CellDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    CELL DELETION RESPONSE
  ************************
CellDeletionResponse ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                                {{CellDeletionResponse-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{CellDeletionResponse-Extensions}}
                                                                                 OPTIONAL,
   . . .
```

```
CellDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                   CRITICALITY ignore
                                                            TYPE CriticalityDiagnostics
                                                                                                       PRESENCE optional },
   . . .
CellDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RESOURCE STATUS INDICATION
           ResourceStatusIndication ::= SEQUENCE {
                                                  {{ResourceStatusIndication-IEs}},
   protocolIEs
                ProtocolIE-Container
                      ProtocolExtensionContainer
                                                 {{ResourceStatusIndication-Extensions}}
   protocolExtensions
                                                                                                       OPTIONAL,
ResourceStatusIndication-IEs NBAP-PROTOCOL-IES ::= {
     PRESENCE mandatory } |
   { ID id-Cause
                                          CRITICALITY ignore TYPE Cause
                                                                                                           PRESENCE optional },
   . . .
ResourceStatusIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   . . .
IndicationType-ResourceStatusInd ::= CHOICE {
   no-Failure
                                       No-Failure-ResourceStatusInd,
   serviceImpacting
                                       ServiceImpacting-ResourceStatusInd,
No-Failure-ResourceStatusInd ::= SEQUENCE {
   local-Cell-InformationList
                                       Local-Cell-InformationList-ResourceStatusInd,
   local-Cell-Group-InformationList
                                       Local-Cell-Group-InformationList-ResourceStatusInd OPTIONAL,
   iE-Extensions
                                       ProtocolExtensionContainer { { No-FailureItem-ResourceStatusInd-ExtIEs} }
No-FailureItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
         id-Power-Local-Cell-Group-InformationList-ResourceStatusInd
                                                                   CRITICALITY
                                                                                 ignore
                                                                                                                 EXTENSION
   Power-Local-Cell-Group-InformationList-ResourceStatusInd
                                                            PRESENCE
                                                                       optional
   . . .
Local-Cell-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
InformationItemIE-ResourceStatusInd }}
```

```
Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
   local-CellID
                                              Local-Cell-ID,
    addorDeleteIndicator
                                              AddorDeleteIndicator,
    dl-or-global-capacityCredit
                                              DL-or-Global-CapacityCredit
                                                                                        OPTIONAL.
    -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
    ul-capacityCredit
                                              UL-CapacityCredit
                                                                                        OPTIONAL,
    commonChannelsCapacityConsumptionLaw
                                              CommonChannelsCapacityConsumptionLaw
                                                                                        OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
    dedicatedChannelsCapacityConsumptionLaw
                                              DedicatedChannelsCapacityConsumptionLaw
                                                                                        OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
    maximumDL-PowerCapability
                                              MaximumDL-PowerCapability
                                                                                        OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
   minSpreadingFactor
                                              MinSpreadingFactor
                                                                                        OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
   minimumDL-PowerCapability
                                              MinimumDL-PowerCapability
                                                                                        OPTIONAL.
    -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
   local-Cell-Group-ID
                                              Local-Cell-ID
                                                                                        OPTIONAL,
   iE-Extensions
                                              ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL.
Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-ReferenceClockAvailability
                                              CRITICALITY ignore
                                                                     EXTENSION ReferenceClockAvailability
    { ID
                                                                                                                           PRESENCE
   optional }|
    -- This IE shall be present if AddorDeleteIndicator IE is set to 'add' and the Local Cell is related to a TDD cell
          id-Power-Local-Cell-Group-ID
                                              CRITICALITY ignore
                                                                     EXTENSION Local-Cell-ID
                                                                                                                           PRESENCE
    optional }|
    [ ID
          id-HSDPA-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION HSDPA-Capability
                                                                                                                           PRESENCE
    optional }
    { ID
          id-E-DCH-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCH-Capability
                                                                                                                           PRESENCE
    optional }|
    { ID id-E-DCH-TTI2ms-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCH-TTI2ms-Capability
                                                                                                                           PRESENCE
    conditional }|
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
          id-E-DCH-SF-Capability
   { ID
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCH-SF-Capability
                                                                                                                           PRESENCE
    conditional }|
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
           id-E-DCH-HARQ-Combining-Capability
                                                         CRITICALITY ignore
                                                                                     EXTENSION E-DCH-HARQ-Combining-Capability
    PRESENCE
               conditional }|
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
           id-E-DCH-CapacityConsumptionLaw
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCHCapacityConsumptionLaw
                                                                                                                   PRESENCE
                                                                                                                                  optional }
          id-F-DPCH-Capability
                                                                     EXTENSION F-DPCH-Capability
                                              CRITICALITY ignore
                                                                                                                    PRESENCE
                                                                                                                                  optional }
     ID id-E-DCH-TDD-CapacityConsumptionLaw
                                                  CRITICALITY ignore
                                                                         EXTENSION E-DCH-TDD-CapacityConsumptionLaw
                                                                                                                           PRESENCE
    optional }|
           id-ContinuousPacketConnectivityDTX-DRX-Capability
                                                                     CRITICALITY ignore
                                                                                                               EXTENSION
ContinuousPacketConnectivityDTX-DRX-Capability
                                                      PRESENCE
                                                                 optional }
    { ID
           id-Max-UE-DTX-Cycle
                                              CRITICALITY ignore
                                                                     EXTENSION Max-UE-DTX-Cycle
                                                                                                                   PRESENCE
                                                                                                                                  conditional
} |
```

```
-- The IE shall be present if Continuous Packet Connectivity DTX-DRX Capability IE is present and set to 'Continuous Packet Connectivity DTX-
DRX Capable!.
     ID id-ContinuousPacketConnectivityHS-SCCH-less-Capability
                                                                   CRITICALITY ignore
                                                                                                            EXTENSION
ContinuousPacketConnectivityHS-SCCH-less-Capability
                                                                   optional }|
           id-MIMO-Capability
                                            CRITICALITY ignore
                                                                   EXTENSION MIMO-Capability
                                                                                                                PRESENCE
                                                                                                                              optional }
           id-SixtyfourOAM-DL-Capability
                                            CRITICALITY ignore
                                                                   EXTENSION SixtyfourOAM-DL-Capability
     ID
                                                                                                                PRESENCE
                                                                                                                              optional }
          id-MBMS-Capability
                                            CRITICALITY ignore
                                                                   EXTENSION MBMS-Capability
     TD
                                                                                                                PRESENCE
                                                                                                                              optional }
           id-Enhanced-FACH-Capability
                                                                   EXTENSION Enhanced-FACH-Capability
     ID
                                            CRITICALITY ignore
                                                                                                                PRESENCE
                                                                                                                              optional }|
     TD
           id-Enhanced-PCH-Capability
                                            CRITICALITY ignore
                                                                   EXTENSION Enhanced-PCH-Capability
                                                                                                                PRESENCE
                                                                                                                              conditional
    -- The IE shall be present if Enhanced FACH Capability IE is set to 'Enhanced FACH Capable'.
           id-SixteenQAM-UL-Capability
                                            CRITICALITY ignore
                                                                   EXTENSION SixteenQAM-UL-Capability
                                                                                                                PRESENCE
                                                                                                                              optional }
           id-HSDSCH-MACdPDU-SizeCapability
                                            CRITICALITY ignore
                                                                   EXTENSION HSDSCH-MACdPDU-SizeCapability
     ID
                                                                                                                PRESENCE
                                                                                                                              optional
     ID
          id-MBSFN-Only-Mode-Capability
                                            CRITICALITY ignore
                                                                   EXTENSION MBSFN-Only-Mode-Capability
                                                                                                                PRESENCE
                                                                                                                              optional
     ID
          id-F-DPCH-SlotFormatCapability
                                            CRITICALITY ignore
                                                                   EXTENSION F-DPCH-SlotFormatCapability
                                                                                                                PRESENCE
                                                                                                                              optional
     TD
          id-E-DCH-MACdPDU-SizeCapability
                                            CRITICALITY ignore
                                                                   EXTENSION E-DCH-MACdPDU-SizeCapability
                                                                                                                PRESENCE
                                                                                                                              optional
     ID
          id-Common-EDCH-Capability
                                            CRITICALITY ignore
                                                                   EXTENSION Common-EDCH-Capability
                                                                                                                PRESENCE
                                                                                                                              optional }
          id-E-AI-Capability
     ID
                                         CRITICALITY ignore
                                                               EXTENSION E-AI-Capability
                                                                                                            PRESENCE optional } |
    -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
     ID id-Enhanced-UE-DRX-Capability
                                             CRITICALITY ignore
                                                                   EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                PRESENCE
                                                                                                                              optional }
     ID id-Enhanced-UE-DRX-CapabilityLCR
                                             CRITICALITY ignore
                                                                   EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                PRESENCE
                                                                                                                              optional
     ID id-E-DPCCH-Power-Boosting-Capability
                                             CRITICALITY ignore
                                                                   EXTENSION E-DPCCH-Power-Boosting-Capability
                                                                                                                PRESENCE
                                                                                                                              optional }|
          id-SixtyfourQAM-DL-MIMO-Combined-Capability
                                                        CRITICALITY ignore
                                                                              EXTENSION SixtyfourQAM-DL-MIMO-Combined-Capability
   PRESENCE
              optional}|
     ID id-Multi-Cell-Capability-Info
                                             CRITICALITY ignore
                                                                   EXTENSION Multi-Cell-Capability-Info
                                                                                                                PRESENCE
                                                                                                                              optional }|
     ID id-Semi-PersistentScheduling-CapabilityLCR
                                                    CRITICALITY ignore
                                                                              EXTENSION Semi-PersistentScheduling-CapabilityLCR
   PRESENCE
              optional }|
    { ID id-ContinuousPacketConnectivity-DRX-CapabilityLCR
                                                            CRITICALITY ignore
                                                                                      EXTENSION ContinuousPacketConnectivity-DRX-
CapabilityLCR
                      PRESENCE
                                 optional }|
    { ID id-Common-E-DCH-HSDPCCH-Capability
                                             CRITICALITY ignore
                                                                           EXTENSION Common-E-DCH-HSDPCCH-Capability
   PRESENCE
              optional }
   -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
   PRESENCE
   optional }
   ID id-TxDiversitvOnDLControlChannelsBvMIMOUECapability
                                                           CRITICALITY ignore EXTENSION TxDiversityOnDLControlChannelsBvMIMOUECapability
                  optional }|
       PRESENCE
     ID id-Cell-Capability-Container CRITICALITY ignore EXTENSION Cell-Capability-Container
                                                                                                            PRESENCE
                                                                                                                       optional }|
     ID id-PrecodingWeightSetRestriction
                                            CRITICALITY ignore EXTENSION PrecodingWeightSetRestriction
                                                                                                                PRESENCE
                                                                                                                              optional },
Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE-ResourceStatusInd }}
Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
Local-Cell-Group-InformationItem-ResourceStatusInd::= SEQUENCE {
   local-Cell-Group-ID
                                            Local-Cell-ID,
   dl-or-global-capacityCredit
                                            DL-or-Global-CapacityCredit,
   ul-capacityCredit
                                            UL-CapacityCredit
                                                                   OPTIONAL,
```

```
commonChannelsCapacityConsumptionLaw
                                              CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw
                                              DedicatedChannelsCapacityConsumptionLaw,
                                              ProtocolExtensionContainer { { Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs} }
   iE-Extensions
   OPTIONAL.
Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-E-DCH-CapacityConsumptionLaw
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCHCapacityConsumptionLaw
                                                                                                                   PRESENCE optional }
     ID id-E-DCH-TDD-CapacityConsumptionLaw
                                                                                                                   PRESENCE optional },
                                             CRITICALITY ignore
                                                                     EXTENSION E-DCH-TDD-CapacityConsumptionLaw
Power-Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-
Cell-Group-InformationItemIE-ResourceStatusInd }}
Power-Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd
                                                                    CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem-
                      PRESENCE mandatory }
ResourceStatusInd
Power-Local-Cell-Group-InformationItem-ResourceStatusInd::= SEQUENCE {
   power-Local-Cell-Group-ID
                                             Local-Cell-ID,
   maximumDL-PowerCapability
                                              MaximumDL-PowerCapability,
   iE-Extensions
                                              ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs} }
   OPTIONAL,
Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
ServiceImpacting-ResourceStatusInd ::= SEQUENCE {
   local-Cell-InformationList
                                          Local-Cell-InformationList2-ResourceStatusInd OPTIONAL.
   local-Cell-Group-InformationList
                                          Local-Cell-Group-InformationList2-ResourceStatusInd OPTIONAL,
   cCP-InformationList
                                          CCP-InformationList-ResourceStatusInd
                                                                                        OPTIONAL,
    cell-InformationList
                                          Cell-InformationList-ResourceStatusInd
                                                                                        OPTIONAL,
   iE-Extensions
                                          ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs} }
                                                                                                                                 OPTIONAL,
    . . .
ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd
                                                                        CRITICALITY ignore EXTENSION Power-Local-Cell-Group-InformationList2-
                      PRESENCE optional \}.
ResourceStatusInd
Local-Cell-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
InformationItemIE2-ResourceStatusInd }}
Local-Cell-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::=
    PRESENCE mandatory }
```

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Local-Cell-InformationItem2-ResourceStatusInd ::= SEQUENCE {
                                             Local-Cell-ID.
   local-Cell-ID
    dl-or-global-capacityCredit
                                             DL-or-Global-CapacityCredit
                                                                                   OPTIONAL.
                                             UL-CapacityCredit
    ul-capacityCredit
                                                                                   OPTIONAL,
    commonChannelsCapacityConsumptionLaw
                                             CommonChannelsCapacityConsumptionLaw
                                                                                   OPTIONAL,
    dedicatedChannelsCapacityConsumptionLaw
                                             DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
    maximum-DL-PowerCapability
                                             MaximumDL-PowerCapability
                                                                                   OPTIONAL,
   minSpreadingFactor
                                             MinSpreadingFactor
                                                                                   OPTIONAL,
    minimumDL-PowerCapability
                                             MinimumDL-PowerCapability
                                                                                   OPTIONAL,
    iE-Extensions
                                         ProtocolExtensionContainer { { Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs} }
   OPTIONAL.
    . . .
Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-ReferenceClockAvailability
                                                                        EXTENSION ReferenceClockAvailability
                                         CRITICALITY ignore
                                                                                                                         PRESENCE
    optional }|
    { ID id-HSDPA-Capability
                                             CRITICALITY ignore
                                                                        EXTENSION HSDPA-Capability
                                                                                                                         PRESENCE
    optional }|
    { ID id-E-DCH-Capability
                                             CRITICALITY ignore
                                                                        EXTENSION E-DCH-Capability
                                                                                                                         PRESENCE
    optional }|
    { ID id-E-DCH-TTI2ms-Capability
                                             CRITICALITY ignore
                                                                        EXTENSION E-DCH-TTI2ms-Capability
                                                                                                                         PRESENCE
    conditional }|
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
    { ID id-E-DCH-SF-Capability
                                           CRITICALITY ignore
                                                                        EXTENSION E-DCH-SF-Capability
                                                                                                                         PRESENCE
    conditional }|
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
    { ID id-E-DCH-HARQ-Combining-Capability
                                                 CRITICALITY ignore
                                                                                   EXTENSION E-DCH-HARO-Combining-Capability
    PRESENCE conditional } |
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
    EXTENSION E-DCHCapacityConsumptionLaw
                                                                                                                         PRESENCE
    optional }|
    ID id-F-DPCH-Capability
                                             CRITICALITY ignore
                                                                        EXTENSION F-DPCH-Capability
                                                                                                                         PRESENCE
    optional }|
    { ID id-E-DCH-TDD-CapacityConsumptionLaw
                                                 CRITICALITY ignore
                                                                        EXTENSION E-DCH-TDD-CapacityConsumptionLaw
                                                                                                                         PRESENCE
    optional }|
          id-ContinuousPacketConnectivityDTX-DRX-Capability
                                                                    CRITICALITY ignore
                                                                                                             EXTENSION
ContinuousPacketConnectivityDTX-DRX-Capability
                                                     PRESENCE
                                                                optional }
          id-Max-UE-DTX-Cycle
                                             CRITICALITY ignore
                                                                        EXTENSION Max-UE-DTX-Cycle
                                                                                                                         PRESENCE
    conditional }|
    -- The IE shall be present if Continuous Packet Connectivity DTX-DRX Capability IE is present and set to 'Continuous Packet Connectivity DTX-
DRX Capable'.
    { ID id-ContinuousPacketConnectivityHS-SCCH-less-Capability
                                                                    CRITICALITY ignore
                                                                                                              EXTENSION
ContinuousPacketConnectivityHS-SCCH-less-Capability
                                                                    optional }|
   { ID id-MIMO-Capability
                                                                    EXTENSION MIMO-Capability
                                             CRITICALITY ignore
                                                                                                                         PRESENCE
    optional }|
    { ID id-SixtyfourQAM-DL-Capability
                                             CRITICALITY ignore
                                                                    EXTENSION SixtyfourQAM-DL-Capability
                                                                                                                         PRESENCE
    optional }|
         id-MBMS-Capability
    { ID
                                                                    EXTENSION MBMS-Capability
                                             CRITICALITY ignore
                                                                                                                         PRESENCE
    optional }
    { ID id-Enhanced-FACH-Capability
                                             CRITICALITY ignore
                                                                    EXTENSION Enhanced-FACH-Capability
                                                                                                                         PRESENCE
    optional }|
```

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{ ID id-Enhanced-PCH-Capability
                                          CRITICALITY ignore
                                                               EXTENSION Enhanced-PCH-Capability
                                                                                                                PRESENCE
   conditional }
   -- The IE shall be present if Enhanced FACH Capability IE is set to 'Enhanced FACH Capable'.
   { ID id-SixteenOAM-UL-Capability
                                                               EXTENSION SixteenOAM-UL-Capability
                                          CRITICALITY ignore
                                                                                                                PRESENCE
   optional }|
   [ ID
         id-HSDSCH-MACdPDU-SizeCapability
                                                               EXTENSION HSDSCH-MACdPDU-SizeCapability
                                          CRITICALITY ignore
                                                                                                                PRESENCE
   optional }|
                                          CRITICALITY ignore
   { ID
         id-MBSFN-Only-Mode-Capability
                                                               EXTENSION MBSFN-Only-Mode-Capability
                                                                                                                PRESENCE
   optional }|
   { ID id-F-DPCH-SlotFormatCapability
                                          CRITICALITY ignore
                                                               EXTENSION F-DPCH-SlotFormatCapability
                                                                                                                PRESENCE
   optional }|
   { ID id-E-DCH-MACdPDU-SizeCapability
                                          CRITICALITY ignore
                                                               EXTENSION E-DCH-MACdPDU-SizeCapability
                                                                                                                PRESENCE
   optional }|
   { ID id-Common-EDCH-Capability
                                          CRITICALITY ignore
                                                               EXTENSION Common-EDCH-Capability
                                                                                                                PRESENCE
   optional }|
   { ID id-E-AI-Capability
                                          CRITICALITY ignore
                                                               EXTENSION E-AI-Capability
                                                                                                                PRESENCE
   optional }|
   -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
         id-Enhanced-UE-DRX-Capability
                                          CRITICALITY ignore
                                                               EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                PRESENCE
   optional }|
   EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                PRESENCE
   optional }|
          id-E-DPCCH-Power-Boosting-Capability
                                                 CRITICALITY ignore
   { ID
                                                                      EXTENSION E-DPCCH-Power-Boosting-Capability
              PRESENCE optional }
   { ID
          id-SixtyfourQAM-DL-MIMO-Combined-Capability
                                                    CRITICALITY ignore
                                                                          EXTENSION SixtyfourQAM-DL-MIMO-Combined-Capability
   PRESENCE
             optional}
         id-Multi-Cell-Capability-Info
   { ID
                                          CRITICALITY ignore
                                                               EXTENSION Multi-Cell-Capability-Info
                                                                                                                PRESENCE
   optional }|
   { ID id-Semi-PersistentScheduling-CapabilityLCR
                                                                          EXTENSION Semi-PersistentScheduling-CapabilityLCR
                                                 CRITICALITY ignore
   PRESENCE optional }
   { ID id-ContinuousPacketConnectivity-DRX-CapabilityLCR
                                                        CRITICALITY ignore
                                                                                 EXTENSION ContinuousPacketConnectivity-DRX-
CapabilityLCR
                    PRESENCE optional }
   { ID id-Common-E-DCH-HSDPCCH-Capability
                                           CRITICALITY ignore
                                                                      EXTENSION Common-E-DCH-HSDPCCH-Capability
             optional }|
   -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
   EXTENSION MIMO-PowerOffsetForS-CPICHCapability
                                                                                                                       PRESENCE
   optional } |
   PRESENCE
                 optional }|
    ID id-Cell-Capability-Container CRITICALITY ignore EXTENSION Cell-Capability-Container
                                                                                                      PRESENCE
                                                                                                                optional }|
   ID id-PrecodingWeightSetRestriction
                                          CRITICALITY ignore EXTENSION PrecodingWeightSetRestriction
                                                                                                                       optional },
                                                                                                          PRESENCE
   . . .
Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEOUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE2-ResourceStatusInd }}
Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   TYPE Local-Cell-Group-InformationItem2-ResourceStatusInd
       PRESENCE mandatory }
Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
   local-Cell-Group-ID
                                          Local-Cell-ID,
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783

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dl-or-global-capacityCredit
                                           DL-or-Global-CapacityCredit
                                                                                  OPTIONAL,
   ul-capacityCredit
                                           UL-CapacityCredit
                                                                                  OPTIONAL.
   commonChannelsCapacityConsumptionLaw
                                           CommonChannelsCapacityConsumptionLaw
                                                                                  OPTIONAL.
   dedicatedChannelsCapacityConsumptionLaw
                                           DedicatedChannelsCapacityConsumptionLaw
                                                                                  OPTIONAL,
   iE-Extensions
                                       ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs} }
   OPTIONAL,
Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-E-DCH-CapacityConsumptionLaw
                                                                EXTENSION E-DCHCapacityConsumptionLaw
                                          CRITICALITY ignore
                                                                                                           PRESENCE optional } |
   { ID id-E-DCH-TDD-CapacityConsumptionLaw
                                                                EXTENSION E-DCH-TDD-CapacityConsumptionLaw
                                          CRITICALITY ignore
                                                                                                        PRESENCE optional },
   . . .
CCP-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-
ResourceStatusInd }}
CCP-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
CCP-InformationItem-ResourceStatusInd ::= SEQUENCE {
   communicationControlPortID
                                       CommunicationControlPortID
   resourceOperationalState
                                       ResourceOperationalState,
   availabilityStatus
                                       AvailabilityStatus,
   iE-Extensions
                                       OPTIONAL,
CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-
ResourceStatusInd }}
Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::=
   PRESENCE mandatory
Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
                                       ResourceOperationalState
   resourceOperationalState
                                                                                  OPTIONAL,
   availabilitvStatus
                                       AvailabilitvStatus
                                                                                  OPTIONAL,
   primary-SCH-Information
                                       P-SCH-Information-ResourceStatusInd
                                                                                  OPTIONAL, -- FDD only
                                       S-SCH-Information-ResourceStatusInd
   secondary-SCH-Information
                                                                                  OPTIONAL, -- FDD only
                                                                                  OPTIONAL, -- FDD only
   primary-CPICH-Information
                                       P-CPICH-Information-ResourceStatusInd
   secondary-CPICH-Information
                                       S-CPICH-InformationList-ResourceStatusInd
                                                                                  OPTIONAL, -- FDD only
   primary-CCPCH-Information
                                       P-CCPCH-Information-ResourceStatusInd
                                                                                  OPTIONAL,
   bCH-Information
                                       BCH-Information-ResourceStatusInd
                                                                                  OPTIONAL,
   secondary-CCPCH-InformationList
                                       S-CCPCH-InformationList-ResourceStatusInd
                                                                                  OPTIONAL,
   pCH-Information
                                       PCH-Information-ResourceStatusInd
                                                                                  OPTIONAL,
   pICH-Information
                                       PICH-Information-ResourceStatusInd
                                                                                  OPTIONAL,
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fACH-InformationList
                                            FACH-InformationList-ResourceStatusInd
                                                                                           OPTIONAL,
    pRACH-InformationList
                                           PRACH-InformationList-ResourceStatusInd
                                                                                           OPTIONAL.
    rACH-InformationList
                                           RACH-InformationList-ResourceStatusInd
                                                                                           OPTIONAL.
    aICH-InformationList
                                           AICH-InformationList-ResourceStatusInd
                                                                                           OPTIONAL, -- FDD only
    notUsed-1-pCPCH-InformationList
                                                                                            OPTIONAL,
    notUsed-2-cPCH-InformationList
                                           NULL
                                                                                           OPTIONAL,
    notUsed-3-aP-AICH-InformationList
                                           NULL
                                                                                           OPTIONAL,
    notUsed-4-cDCA-ICH-InformationList
                                           NULL
                                                                                           OPTIONAL,
    sCH-Information
                                           SCH-Information-ResourceStatusInd
                                                                                           OPTIONAL, -- Applicable to 3.84Mcps TDD only
                                           ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs} }
    iE-Extensions
Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-InformationList-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-ResourceStatusInd
        PRESENCE optional } -- Applicable to 1.28Mcps TDD only
     ID id-DwPCH-LCR-Information-ResourceStatusInd
                                                               CRITICALITY ignore EXTENSION DwPCH-LCR-Information-ResourceStatusInd
                                  -- Applicable to 1.28Mcps TDD only
            PRESENCE optional }
    { ID id-HSDSCH-Resources-Information-ResourceStatusInd
                                                               CRITICALITY ignore EXTENSION HS-DSCH-Resources-Information-ResourceStatusInd
        PRESENCE optional } -- For 1.28Mcps TDD, this HS-DSCH Resource Information is for the first Frequency repetition, HS-DSCH Resource
Information for Frequency repetitions 2 and on, should be defined in MultipleFreq-HS-DSCH-Resources-InformationList-ResourceStatusInd.
    { ID id-MICH-Information-ResourceStatusInd
                                                               CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information
           PRESENCE optional }
    { ID id-S-CCPCH-InformationListExt-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION S-CCPCH-InformationListExt-ResourceStatusInd
       PRESENCE optional } |
    -- Applicable to 3.84Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the message.
    { ID id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd
                                                               CRITICALITY ignore EXTENSION S-CCPCH-LCR-InformationListExt-ResourceStatusInd
    PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the message.
    { ID id-E-DCH-Resources-Information-ResourceStatusInd
                                                               CRITICALITY ignore EXTENSION E-DCH-Resources-Information-ResourceStatusInd
        PRESENCE optional } |
    -- For 1.28Mcps TDD, this E-DCH Resource Information is for the first Frequency repetition, E-DCH Resource Information for Frequency
repetitions 2 and on, should be defined in MultipleFreq-E-DCH-Resources-InformationList-ResourceStatusInd.
    { ID id-PLCCH-InformationList-ResourceStatusInd
                                                               CRITICALITY ignore EXTENSION PLCCH-InformationList-ResourceStatusInd
    PRESENCE optional }
    { ID id-P-CCPCH-768-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768
        PRESENCE optional } |
    { ID id-S-CCPCH-768-InformationList-ResourceStatusInd
                                                               CRITICALITY ignore EXTENSION S-CCPCH-768-InformationList-ResourceStatusInd
        PRESENCE optional }
    { ID id-PICH-768-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768
    PRESENCE optional }
    { ID id-PRACH-768-InformationList-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION PRACH-768-InformationList-ResourceStatusInd
        PRESENCE optional }
     ID id-SCH-768-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768
    PRESENCE optional }
    { ID id-MICH-768-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768
    PRESENCE optional }
    { ID id-E-RUCCH-InformationList-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION E-RUCCH-InformationList-ResourceStatusInd
        PRESENCE optional } |
     ID id-E-RUCCH-768-InformationList-ResourceStatusInd
                                                                    CRITICALITY ignore EXTENSION E-RUCCH-768-InformationList-ResourceStatusInd
            PRESENCE optional }
    { ID id-Cell-Frequency-List-Information-LCR-MulFreq-ResourceStatusInd
                                                                                CRITICALITY ignore
                                                                                                                        EXTENSION Cell-Frequency-
List-Information-LCR-MulFreq-ResourceStatusInd
                                                        PRESENCE optional } |
                                                                                -- Applicable to 1.28Mcps TDD when using multiple frequencies
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{ ID id-UPPCH-LCR-InformationList-ResourceStatusInd
                                                             CRITICALITY ignore
                                                                                            EXTENSION UPPCH-LCR-
InformationList-ResourceStatusInd
                                       PRESENCE optional } -- Applicable to 1.28Mcps TDD only
   EXTENSION MultipleFreg-HS-
DSCH-Resources-InformationList-ResourceStatusInd PRESENCE optional }
   -- Applicable to 1.28Mcps TDD when using multiple frequencies, This HS-DSCH Resource Information is for the 2nd and beyond frequencies.
   { ID id-MultipleFreg-E-DCH-Resources-InformationList-ResourceStatusInd
                                                             CRITICALITY ignore
                                                                                            EXTENSION MultipleFreg-E-
DCH-Resources-InformationList-ResourceStatusInd PRESENCE optional },
   -- Applicable to 1.28Mcps TDD when using multiple frequencies. This E-DCH Resource Information is for the 2nd and beyond frequencies.
P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}
P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}
S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}
P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
S-CPICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-
ResourceStatusInd }}
S-CPICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
P-CCPCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-ResourceStatusInd }}
P-CCPCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-P-CCPCH-Information CRITICALITY ignore
                                         TYPE Common-PhysicalChannel-Status-Information
                                                                                            PRESENCE mandatory }
BCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ BCH-InformationIE-ResourceStatusInd }}
BCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
S-CCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-
ResourceStatusInd }}
S-CCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
```

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PCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PCH-InformationIE-ResourceStatusInd }}
PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}
PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
FACH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-
ResourceStatusInd }}
FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-FACH-Information CRITICALITY ignore TYPE Common-TransportChannel-Status-Information
                                                                                             PRESENCE mandatory }
PRACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-
ResourceStatusInd }}
PRACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RACH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-
ResourceStatusInd }}
RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
AICH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-
ResourceStatusInd }}
AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}
SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
FPACH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-
ResourceStatusInd }}
FPACH-LCR-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-FPACH-LCR-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                            PRESENCE mandatory }
```

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DwPCH-LCR-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-ResourceStatusInd }}
DwPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-DwPCH-LCR-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                            PRESENCE mandatory }
HS-DSCH-Resources-Information-ResourceStatusInd ::= SEQUENCE {
   resourceOperationalState
                                    ResourceOperationalState.
   availabilityStatus
                                    AvailabilityStatus,
   iE-Extensions
                                    ProtocolExtensionContainer {{ HS-DSCH-Resources-Information-ResourceStatusInd-ExtIEs }}
   OPTIONAL,
   . . .
HS-DSCH-Resources-Information-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-UARFCNforNt
                       CRITICALITY ignore
                                              EXTENSION UARFCN
                                                                    PRESENCE optional },
   -- Applicable to 1.28Mcps TDD when using multiple frequencies.
S-CCPCH-InformationListExt-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCellinExt)) OF ProtocolIE-Single-Container {{ S-CCPCH-
InformationItemIE-ResourceStatusInd }}
S-CCPCH-LCR-InformationListExt-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxSCCPCHCellinExtLCR)) OF ProtocolIE-Single-Container {{ S-CCPCH-
InformationItemIE-ResourceStatusInd }}
E-DCH-Resources-Information-ResourceStatusInd ::= SEQUENCE {
   resourceOperationalState
                                    ResourceOperationalState,
   availabilityStatus
                                    AvailabilityStatus,
   iE-Extensions
                                    ProtocolExtensionContainer {{ E-DCH-Resources-Information-ResourceStatusInd-ExtIEs }}
                                                                                                                          OPTIONAL,
   . . .
E-DCH-Resources-Information-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                                                                    PRESENCE optional }.
   {ID id-UARFCNforNt
                       CRITICALITY ignore
                                              EXTENSION UARFON
   -- Applicable to 1.28Mcps TDD when using multiple frequencies.
PLCCH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxPLCCHCell)) OF ProtocolIE-Single-Container {{ PLCCH-InformationItemIE-
ResourceStatusInd }}
PLCCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
S-CCPCH-768-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxSCCPCHCell768)) OF ProtocolIE-Single-Container {{ S-CCPCH-768-
InformationItemIE-ResourceStatusInd }}
S-CCPCH-768-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
```

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PRACH-768-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-768-InformationItemIE-
ResourceStatusInd }}
PRACH-768-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
     ID id-PRACH-768-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information768
                                                                                                                    PRESENCE mandatory }
E-RUCCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxE-RUCCHCell)) OF ProtocolIE-Single-Container {{ E-RUCCH-InformationItemIE-
ResourceStatusInd }}
E-RUCCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
                                  CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
    { ID id-E-RUCCH-Information
                                                                                                                    PRESENCE mandatory }
E-RUCCH-768-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxE-RUCCHCell)) OF ProtocolIE-Single-Container {{ E-RUCCH-768-
InformationItemIE-ResourceStatusInd }}
E-RUCCH-768-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
     ID id-E-RUCCH-768-Information
                                      CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information768
                                                                                                                     PRESENCE mandatory }
Cell-Frequency-List-Information-LCR-MulFreq-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ Cell-FrequencyinCell}}
Frequency-List-InformationIE-LCR-MulFreq-ResourceStatusInd }}
Cell-Frequency-List-InformationIE-LCR-MulFreq-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    TYPE Cell-Frequency-List-
InformationItem-LCR-MulFreg-ResourceStatusInd
                                                  PRESENCE mandatory }
Cell-Frequency-List-InformationItem-LCR-MulFreq-ResourceStatusInd ::= SEQUENCE {
    uARFCN
                                      UARFCN,
    resourceOperationalState
                                      ResourceOperationalState,
    availabilityStatus
                                      AvailabilityStatus,
    cause
                                      ProtocolExtensionContainer {{ Cell-Frequency-List-InformationItem-LCR-MulFreq-ResourceStatusInd-ExtIEs }}
    iE-Extensions
       OPTIONAL,
Cell-Frequency-List-InformationItem-LCR-MulFreq-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UPPCH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ UPPCH-LCR-InformationIE-
ResourceStatusInd }}
UPPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
     ID id-UPPCH-LCR-InformationItem-ResourceStatusInd
                                                          CRITICALITY ignore TYPE UPPCH-LCR-InformationItem-ResourceStatusInd
    PRESENCE mandatory }
UPPCH-LCR-InformationItem-ResourceStatusInd ::= SEQUENCE
                                                          OPTIONAL,
    uARFCN
                                      UARFCN
    uPPCHPositionLCR
                                      UPPCHPositionLCR,
```

```
resourceOperationalState
                                  ResourceOperationalState,
   availabilityStatus
                                  AvailabilityStatus,
   iE-Extensions
                                  ProtocolExtensionContainer {{ UPPCH-LCR-InformationItem-ResourceStatusInd-ExtIEs }}
                                                                                                                   OPTIONAL.
UPPCH-LCR-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleFreq-HS-DSCH-Resources-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-
Container{{ MultipleFreq-HS-DSCH-Resources-InformationItem-ResourceStatusInd }}
--Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreg-HS-DSCH-Resources-InformationItem-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
Power-Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-
Local-Cell-Group-InformationItemIE2-ResourceStatusInd }}
Power-Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   ResourceStatusInd
                    PRESENCE mandatory }
Power-Local-Cell-Group-InformationItem2-ResourceStatusInd::= SEQUENCE {
   power-Local-Cell-Group-ID
                                  Local-Cell-ID,
   maximumDL-PowerCapability
                                  MaximumDL-PowerCapability,
   iE-Extensions
                                  ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs} }
   OPTIONAL,
   . . .
Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
MultipleFreq-E-DCH-Resources-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-
Container { MultipleFreq-E-DCH-Resources-InformationItem-ResourceStatusInd }}
   --Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreq-E-DCH-Resources-InformationItem-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    ID id-E-DCH-Resources-Information-ResourceStatusInd CRITICALITY ignore TYPE E-DCH-Resources-Information-ResourceStatusInd
   PRESENCE mandatory
  **********************
-- SYSTEM INFORMATION UPDATE REQUEST
  ******************
```

```
SystemInformationUpdateRequest ::= SEQUENCE
    protocolIEs
                           ProtocolIE-Container
                                                         {{SystemInformationUpdateRequest-IEs}},
    protocolExtensions
                            ProtocolExtensionContainer
                                                        {{SystemInformationUpdateRequest-Extensions}}
                                                                                                                         OPTIONAL.
SystemInformationUpdateRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID
                                                                CRITICALITY reject TYPE C-ID
                                                                                                                                         PRESENCE
mandatory } |
    { ID id-BCCH-ModificationTime
                                                                CRITICALITY reject TYPE BCCH-ModificationTime
                                                                                                                                         PRESENCE
optional }
    { ID id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst
                                                                CRITICALITY reject TYPE MIB-SB-SIB-InformationList-SystemInfoUpdateRqst
            PRESENCE mandatory },
SystemInformationUpdateRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
MIB-SB-SIB-InformationList-SystemInfoUpdateRqst ::= SEQUENCE (SIZE (1..maxIB)) OF MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst
MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst ::= SEQUENCE {
    iB-Type
                                        IB-Type,
   iB-OC-ID
                                        IB-OC-ID,
    deletionIndicator
                                        DeletionIndicator-SystemInfoUpdate,
                                        ProtocolExtensionContainer { { MIB-SB-SIB-InformationItem-SystemInfoUpdateRgst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DeletionIndicator-SystemInfoUpdate ::= CHOICE {
    no-Deletion
                                        No-Deletion-SystemInfoUpdate,
    yes-Deletion
                                        NULL
No-Deletion-SystemInfoUpdate ::= SEQUENCE {
    sIB-Originator
                                            SIB-Originator
                                                                         OPTIONAL,
    -- This IE shall be present if the IB-Type IE is set to "SIB"
                                            IB-SG-REP
    iB-SG-REP
    segmentInformationList
                                            SegmentInformationList-SystemInfoUpdate,
   iE-Extensions
                                            ProtocolExtensionContainer { { No-DeletionItem-SystemInfoUpdate-ExtIEs} } 
                                                                                                                                 OPTIONAL,
No-DeletionItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

. . .

```
SegmentInformationList-SystemInfoUpdate ::= ProtocolIE-Single-Container {{ SegmentInformationListIEs-SystemInfoUpdate }}
SegmentInformationListIEs-SystemInfoUpdate NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
SegmentInformationListIE-SystemInfoUpdate ::= SEQUENCE (SIZE (1..maxIBSEG)) OF SegmentInformationItem-SystemInfoUpdate
SegmentInformationItem-SystemInfoUpdate ::= SEQUENCE {
   iB-SG-POS
                                     IB-SG-POS
                                                      OPTIONAL,
   segment-Type
                                     Segment-Type
                                                      OPTIONAL,
   -- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
   iB-SG-DATA
                                     IB-SG-DATA
                                                      OPTIONAL,
   -- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
   iE-Extensions
                                     ProtocolExtensionContainer { { SegmentInformationItem-SystemInfoUpdate-ExtIEs} }
                                                                                                             OPTIONAL,
   . . .
SegmentInformationItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    *******************
  SYSTEM INFORMATION UPDATE RESPONSE
       SystemInformationUpdateResponse ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                                {{SystemInformationUpdateResponse-IEs}},
                       ProtocolExtensionContainer
                                              {{SystemInformationUpdateResponse-Extensions}}
   protocolExtensions
                                                                                                      OPTIONAL,
   . . .
SystemInformationUpdateResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                  CRITICALITY ignore
                                                          TYPE CriticalityDiagnostics
                                                                                                   PRESENCE optional },
   . . .
SystemInformationUpdateResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    SYSTEM INFORMATION UPDATE FAILURE
  ***********************
SystemInformationUpdateFailure ::= SEQUENCE
   protocolIEs
                       ProtocolIE-Container
                                                {{SystemInformationUpdateFailure-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer
                                               {{SystemInformationUpdateFailure-Extensions}}
                                                                                                      OPTIONAL,
```

```
SystemInformationUpdateFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Cause
                                          CRITICALITY ignore
                                                                      TYPE Cause
                                                                                                                     PRESENCE
                                                                                                                                   mandatory
     ID id-CriticalityDiagnostics
                                          CRITICALITY ignore
                                                                      TYPE CriticalityDiagnostics
                                                                                                                                   optional
                                                                                                                     PRESENCE
SystemInformationUpdateFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    *******************
-- RADIO LINK SETUP REQUEST FDD
   *****************
RadioLinkSetupRequestFDD ::= SEQUENCE {
                                                       {{RadioLinkSetupRequestFDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
                                                      {{RadioLinkSetupRequestFDD-Extensions}}
   protocolExtensions
                           ProtocolExtensionContainer
                                                                                                                    OPTIONAL,
RadioLinkSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
                                                          CRITICALITY reject TYPE CRNC-CommunicationContextID
    PRESENCE mandatory }
    { ID id-UL-DPCH-Information-RL-SetupRqstFDD
                                                          CRITICALITY reject TYPE UL-DPCH-Information-RL-SetupRqstFDD
    PRESENCE mandatory } |
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD
                                                          CRITICALITY reject TYPE DL-DPCH-Information-RL-SetupRqstFDD
    PRESENCE optional } |
    { ID id-DCH-FDD-Information
                                                          CRITICALITY reject TYPE DCH-FDD-Information
    PRESENCE mandatory } |
    { ID id-RL-InformationList-RL-SetupRqstFDD
                                                          CRITICALITY notify TYPE RL-InformationList-RL-SetupRqstFDD
                                                                                                                                   PRESENCE
mandatory } |
    { ID id-Transmission-Gap-Pattern-Sequence-Information
                                                          CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
                       PRESENCE optional }
    { ID id-Active-Pattern-Sequence-Information
                                                          CRITICALITY reject TYPE Active-Pattern-Sequence-Information
    PRESENCE optional },
    . . .
RadioLinkSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::=
     ID id-DL-PowerBalancing-Information
                                                  CRITICALITY ignore EXTENSION DL-PowerBalancing-Information
                                                                                                                    PRESENCE optional }
                                                                                                                    PRESENCE optional }
     ID id-HSDSCH-FDD-Information
                                                  CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                    PRESENCE conditional } |
    { ID id-HSDSCH-RNTI
                                                  CRITICALITY reject EXTENSION HSDSCH-RNTI
    -- The IE shall be present if HS-DSCH Information IE is present
    { ID id-HSPDSCH-RL-ID
                                                                                                                    PRESENCE conditional } |
                                                  CRITICALITY reject EXTENSION RL-ID
    -- The IE shall be present if HS-DSCH Information IE is present
    { ID id-E-DPCH-Information-RL-SetupRqstFDD
                                                  CRITICALITY reject EXTENSION E-DPCH-Information-RL-SetupRqstFDD
                                                                                                                     PRESENCE optional }
    { ID id-E-DCH-FDD-Information
                                                  CRITICALITY reject EXTENSION E-DCH-FDD-Information
                                                                                                                     PRESENCE conditional } |
    -- The IE shall be present if E-DPCH Information IE is present
```

```
CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
     ID id-Serving-E-DCH-RL-ID
                                                                                                                   PRESENCE optional }
                                                  CRITICALITY reject EXTENSION F-DPCH-Information-RL-SetupRgstFDD
     ID id-F-DPCH-Information-RL-SetupRgstFDD
                                                                                                                   PRESENCE optional }
     ID id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                         CRITICALITY ignore EXTENSION Initial-DL-DPCH-TimingAdjustment-Allowed
               PRESENCE optional } |
    ID id-DCH-Indicator-For-E-DCH-HSDPA-Operation
                                                         CRITICALITY reject EXTENSION DCH-Indicator-For-E-DCH-HSDPA-Operation
                              PRESENCE optional }|
     ID id-Serving-Cell-Change-CFN
                                                         CRITICALITY reject EXTENSION CFN
                                                                                                                   PRESENCE optional }
     ID id-ContinuousPacketConnectivityDTX-DRX-Information
                                                                 CRITICALITY reject
                                                                                        EXTENSION ContinuousPacketConnectivitvDTX-DRX-
Information
                   PRESENCE optional }
    { ID id-ContinuousPacketConnectivityHS-SCCH-less-Information
                                                                 CRITICALITY reject
                                                                                        EXTENSION ContinuousPacketConnectivityHS-SCCH-less-
                   PRESENCE optional }
Information
    { ID id-Additional-HS-Cell-Information-RL-Setup
                                                                 CRITICALITY reject
                                                                                        EXTENSION Additional-HS-Cell-Information-RL-Setup-List
           PRESENCE optional },
Additional-HS-Cell-Information-RL-Setup-List
                                           ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Setup-ItemIEs
Additional-HS-Cell-Information-RL-Setup-ItemIEs ::=SEOUENCE{
   hSPDSCH-RL-ID
                                                  RL-ID,
   C-TD
                                                 C-ID,
                                                 HS-DSCH-FDD-Secondary-Serving-Information,
   hS-DSCH-FDD-Secondary-Serving-Information
                                  ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Setup-ItemIEs-ExtIEs} } OPTIONAL,
    . . .
Additional-HS-Cell-Information-RL-Setup-ItemIEs-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-Information-RL-SetupRgstFDD ::= SEQUENCE {
   ul-ScramblingCode
                                          UL-ScramblingCode,
   minUL-ChannelisationCodeLength
                                         MinUL-ChannelisationCodeLength,
   maxNrOfUL-DPDCHs
                                          MaxNrOfUL-DPDCHs
                                                                 OPTIONAL,
    -- This IE shall be present if Min UL Channelisation Code length IE is set to 4 --
   ul-PunctureLimit
                                          PunctureLimit,
   t FCS
                                          TFCS,
   ul-DPCCH-SlotFormat
                                          UL-DPCCH-SlotFormat,
   ul-SIR-Target
                                          UL-SIR,
    diversityMode
                                          DiversityMode,
   not-Used-sSDT-CellID-Length
                                          NULL
                                                                 OPTIONAL,
    not-Used-s-FieldLength
                                          NULL
                                                                 OPTIONAL.
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} }
                                                                                                                          OPTIONAL,
UL-DPCH-Information-RL-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DPC-Mode
                                                 CRITICALITY reject EXTENSION DPC-Mode
                                                                                                                                 PRESENCE
optional }|
    PRESENCE
optional },
    . . .
```

```
DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    t.FCS
    dl-DPCH-SlotFormat
                                            DL-DPCH-SlotFormat.
    tFCI-SignallingMode
                                            TFCI-SignallingMode,
    t.FCI-Presence
                                            TFCI-Presence
                                                                             OPTIONAL.
    -- this IE shall be present if the DL DPCH slot format IE is set to any of the values from 12 to 16 --
    multiplexingPosition
                                            MultiplexingPosition,
    not-Used-pDSCH-RL-ID
                                            NULL
                                                                             OPTIONAL,
    not-Used-pDSCH-CodeMapping
                                            NULL
                                                                             OPTIONAL,
    powerOffsetInformation
                                            PowerOffsetInformation-RL-SetupRgstFDD,
    fdd-TPC-DownlinkStepSize
                                            FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease
                                            LimitedPowerIncrease,
    innerLoopDLPCStatus
                                            InnerLoopDLPCStatus,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-DPCH-Information-RL-SetupRgstFDD-ExtIEs} }
                                                                                                                                  OPTIONAL.
DL-DPCH-Information-RL-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
    pO1-ForTFCI-Bits
                                            PowerOffset,
   pO2-ForTPC-Bits
                                            PowerOffset,
                                            PowerOffset,
   pO3-ForPilotBits
    iE-Extensions
                                            ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRgstFDD-ExtIEs} }
                                                                                                                                  OPTIONAL,
PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF
    ProtocolIE-Single-Container{{ RL-InformationItemIE-RL-SetupRqstFDD }}
RL-InformationItemIE-RL-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-SetupRgstFDD
                                                         CRITICALITY notify
                                                                                     TYPE RL-InformationItem-RL-SetupRqstFDD
                                                                                                                                          PRESENCE
mandatory }
RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
    rL-ID
                                        RL-ID,
    C-TD
                                        C-ID,
    firstRLS-indicator
                                        FirstRLS-Indicator,
    frameOffset
                                        FrameOffset,
    chipOffset
                                        ChipOffset,
    propagationDelay
                                        PropagationDelay
                                                                         OPTIONAL,
    diversityControlField
                                        DiversityControlField
                                                                         OPTIONAL,
    -- This IE shall be present if the RL is not the first one in the RL Information IE
    dl-CodeInformation
                                        FDD-DL-CodeInformation,
    initialDL-transmissionPower
                                        DL-Power,
    maximumDL-power
                                        DL-Power,
    minimumDL-power
                                        DL-Power,
```

```
not-Used-sSDT-Cell-Identity
                                       NULL
                                                                      OPTIONAL,
    transmitDiversityIndicator
                                       TransmitDiversityIndicator
                                                                      OPTIONAL.
    -- This IE shall be present if Diversity Mode IE in UL DPCH Information group is not set to 'none'
   iE-Extensions
                                       OPTIONAL.
    . . .
RL-InformationItem-RL-SetupRastFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-RL-Specific-DCH-Info
                                                      CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
                                                                                                                 PRESENCE optional } |
     ID id-DelayedActivation
                                                      CRITICALITY reject EXTENSION DelayedActivation
                                                                                                                 PRESENCE optional }
     ID id-Primary-CPICH-Usage-for-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-for-Channel-Estimation
                                                                                                                                    PRESENCE
optional }|
     ID id-Secondary-CPICH-Information
                                                      CRITICALITY ignore EXTENSION CommonPhysicalChannelID
                                                                                                                 PRESENCE optional }
     ID id-E-DCH-RL-Indication
                                                      CRITICALITY reject EXTENSION E-DCH-RL-Indication
                                                                                                                 PRESENCE optional
     ID id-RL-Specific-E-DCH-Info
                                                      CRITICALITY ignore EXTENSION RL-Specific-E-DCH-Info
                                                                                                                 PRESENCE optional
     ID id-SynchronisationIndicator
                                                      CRITICALITY ignore EXTENSION SynchronisationIndicator
                                                                                                                 PRESENCE optional
                                                      CRITICALITY ignore EXTENSION ExtendedPropagationDelay
                                                                                                                 PRESENCE optional
     ID id-ExtendedPropagationDelay
                                                      CRITICALITY reject EXTENSION F-DPCH-SlotFormat
     ID id-F-DPCH-SlotFormat
                                                                                                                 PRESENCE optional
     ID id-HSDSCH-PreconfigurationSetup
                                                      CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationSetup PRESENCE optional
     ID id-E-RNTI
                                                      CRITICALITY ignore EXTENSION E-RNTI
                                                                                                                 PRESENCE optional }
     ID id-Non-Serving-RL-Preconfig-Setup
                                                      CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
                                                                                                                     PRESENCE optional },
E-DPCH-Information-RL-SetupRgstFDD ::= SEOUENCE {
   maxSet-E-DPDCHs
                                               Max-Set-E-DPDCHs.
   ul-PunctureLimit
                                               PunctureLimit,
   e-TFCS-Information
                                               E-TFCS-Information,
   e-TTI
                                               E-TTI,
    e-DPCCH-PO
                                               E-DPCCH-PO,
    e-RGCH-2-IndexStepThreshold
                                               E-RGCH-2-IndexStepThreshold,
    e-RGCH-3-IndexStepThreshold
                                               E-RGCH-3-IndexStepThreshold,
   hARQ-Info-for-E-DCH
                                               HARQ-Info-for-E-DCH,
   hSDSCH-Configured-Indicator
                                               HSDSCH-Configured-Indicator,
                                               ProtocolExtensionContainer { { E-DPCH-Information-RL-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                                    OPTIONAL,
E-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
     ID id-E-RNTI
                                                  CRITICALITY reject EXTENSION E-RNTI
                                                                                                                 PRESENCE optional }
    ID id-MinimumReducedE-DPDCH-GainFactor
                                                   CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor PRESENCE optional },
    . . .
F-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
   powerOffsetInformation
                                       PowerOffsetInformation-F-DPCH-RL-SetupRgstFDD,
    fdd-TPC-DownlinkStepSize
                                       FDD-TPC-DownlinkStepSize,
   limitedPowerIncrease
                                       LimitedPowerIncrease,
   innerLoopDLPCStatus
                                       InnerLoopDLPCStatus,
   iE-Extensions
                                       ProtocolExtensionContainer { { F-DPCH-Information-RL-SetupRqstFDD-ExtIEs} }
   OPTIONAL,
F-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
PowerOffsetInformation-F-DPCH-RL-SetupRgstFDD ::= SEQUENCE {
   pO2-ForTPC-Bits
                                      PowerOffset.
   -- This IE shall be ignored by Node B
                                     ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RADIO LINK SETUP REQUEST TDD
  *****************
RadioLinkSetupRequestTDD ::= SEQUENCE {
                                                     {{RadioLinkSetupRequestTDD-IEs}},
   protocolIEs
                ProtocolIE-Container
                          ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}
   protocolExtensions
                                                                                                             OPTIONAL,
    . . .
RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
                                                        CRITICALITY reject TYPE CRNC-CommunicationContextID
    PRESENCE mandatory }
                                                         CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE optional }
     ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD
     ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                        CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE optional
     ID id-DCH-TDD-Information
                                                        CRITICALITY reject TYPE DCH-TDD-Information
   PRESENCE optional } |
          id-DSCH-TDD-Information
    { ID
                                                         CRITICALITY reject TYPE DSCH-TDD-Information
    PRESENCE optional } |
          id-USCH-Information
    { ID
                                                        CRITICALITY reject TYPE USCH-Information
    PRESENCE optional }
    { ID id-RL-Information-RL-SetupRgstTDD
                                                        CRITICALITY reject TYPE RL-Information-RL-SetupRgstTDD
   PRESENCE mandatory },
    . . .
RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-TDD-Information
                                         CRITICALITY reject
                                                                EXTENSION HSDSCH-TDD-Information
       PRESENCE optional }
    { ID id-HSDSCH-RNTI
                                         CRITICALITY reject
                                                                EXTENSION HSDSCH-RNTI
       PRESENCE conditional }
    -- The IE shall be present if HS-DSCH Information IE is present
    { ID id-HSPDSCH-RL-ID
                                         CRITICALITY reject
                                                                EXTENSION RL-ID
       PRESENCE conditional }
    -- The IE shall be present if HS-DSCH Information IE is present
    { ID id-PDSCH-RL-ID
                                         CRITICALITY ignore
                                                                EXTENSION RL-ID
       PRESENCE optional } |
```

```
{ ID id-E-DCH-Information
                                            CRITICALITY reject
                                                                    EXTENSION E-DCH-Information
       PRESENCE optional }
     ID id-E-DCH-Serving-RL-ID
                                            CRITICALITY reject
                                                                    EXTENSION RL-ID
       PRESENCE optional }
    { ID id-E-DCH-768-Information
                                            CRITICALITY reject
                                                                    EXTENSION E-DCH-768-Information
        PRESENCE optional }
    { ID id-E-DCH-LCR-Information
                                            CRITICALITY reject
                                                                    EXTENSION E-DCH-LCR-Information
       PRESENCE optional }
    { ID id-PowerControlGAP
                                            CRITICALITY ignore
                                                                    EXTENSION ControlGAP
       PRESENCE optional } |
     -- Applicable to 1.28Mcps TDD only
    { ID id-ContinuousPacketConnectivity-DRX-InformationLCR
                                                                CRITICALITY reject EXTENSION ContinuousPacketConnectivity-DRX-InformationLCR
        PRESENCE optional }
    { ID id-HS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                                CRITICALITY reject EXTENSION HS-DSCH-Semi-PersistentScheduling-Information-LCR
        PRESENCE optional } |
    { ID id-E-DCH-Semi-PersistentScheduling-Information-LCR
                                                                CRITICALITY reject EXTENSION E-DCH-Semi-PersistentScheduling-Information-LCR
    PRESENCE optional }
                                            CRITICALITY ignore
    { ID id-IdleIntervalInformation
                                                                    EXTENSION IdleIntervalInformation
    PRESENCE optional }
     ID id-UE-Selected-MBMS-Service-Information
                                                    CRITICALITY ignore EXTENSION UE-Selected-MBMS-Service-Information
                                                                                                                               PRESENCE optional } |
     ID id-HSSCCH-TPC-StepSize
                                            CRITICALITY ignore
                                                                    EXTENSION TDD-TPC-DownlinkStepSize
    PRESENCE optional }
    { ID id-HSDSCH-RNTI-For-FACH
                                            CRITICALITY ignore
                                                                    EXTENSION HSDSCH-RNTI
       PRESENCE optional }.
UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
    ProtocolIE-Single-Container{{ UL-CCTrCH-InformationItemIE-RL-SetupRgstTDD }}
UL-CCTrCH-InformationItemIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD
                                                            CRITICALITY notify
                                                                                    TYPE UL-CCTrCH-InformationItem-RL-SetupRqstTDD
    PRESENCE mandatory }
UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                            CCTrCH-ID,
    tFCS
                                            TFCS,
                                            TFCI-Coding,
    tFCI-Coding
    punctureLimit
                                            PunctureLimit,
    uL-DPCH-Information
                                            UL-DPCH-Information-RL-SetupRqstTDD
                                                                                    OPTIONAL, -- Applicable to 3.84Mcps TDD only
                                            ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                       OPTIONAL,
UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-UL-DPCH-LCR-Information-RL-SetupRgstTDD
                                                       CRITICALITY notify EXTENSION UL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE optional
    } | -- Applicable to 1.28Mcps TDD only
     ID id-UL-SIRTarget
                                                        CRITICALITY reject EXTENSION UL-SIR
    PRESENCE optional }|
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    { ID id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR
    PRESENCE optional }|
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
```

```
ID id-UL-DPCH-768-Information-RL-SetupRqstTDD
                                                         CRITICALITY notify EXTENSION UL-DPCH-768-Information-RL-SetupRqstTDD PRESENCE optional
    }, -- Applicable to 7.68Mcps TDD only
    . . .
UL-DPCH-Information-RL-SetupRgstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRgstTDD }}
UL-DPCH-InformationIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationList-RL-SetupRqstTDD
                                                        CRITICALITY notify TYPE UL-DPCH-InformationItem-RL-SetupRqstTDD
                                                                                                                                         PRESENCE
mandatory }
UL-DPCH-InformationItem-RL-SetupRgstTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    uL-Timeslot-Information
                                            UL-Timeslot-Information,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRgstTDD-ExtIEs} }
                                                                                                                                         OPTIONAL,
    . . .
UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
                                            RepetitionLength,
    repetitionLength
                                            TDD-DPCHOffset,
    tdd-DPCHOffset
    uL-TimeslotLCR-Information
                                            UL-TimeslotLCR-Information,
                                            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRgstTDD-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-768-Information-RL-SetupRgstTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    uL-Timeslot768-Information
                                            UL-Timeslot768-Information,
   iE-Extensions
                                            ProtocolExtensionContainer { { UL-DPCH-768-InformationItem-RL-SetupRgstTDD-ExtIEs} }
   OPTIONAL,
    . . .
UL-DPCH-768-InformationItem-RL-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-InformationItemIE-RL-
SetupRgstTDD }}
DL-CCTrCH-InformationItemIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                        CCTrCH-ID.
   t FCS
                                        TFCS,
   tFCI-Coding
                                        TFCI-Coding.
   punctureLimit
                                        PunctureLimit.
   tdd-TPC-DownlinkStepSize
                                        TDD-TPC-DownlinkStepSize,
   cCTrCH-TPCList
                                        CCTrCH-TPCList-RL-SetupRqstTDD
                                                                             OPTIONAL.
   dL-DPCH-Information
                                        DL-DPCH-Information-RL-SetupRgstTDD
                                                                             OPTIONAL,
                                                                                        -- Applicable to 3.84Mcps TDD only
                                        iE-Extensions
                                                                                                                            OPTIONAL,
DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-Information-RL-SetupRqstTDD
                                                   CRITICALITY notify
                                                                         EXTENSION DL-DPCH-LCR-Information-RL-SetupRqstTDD
   PRESENCE optional } -- Applicable to 1.28Mcps TDD only
     ID id-CCTrCH-Initial-DL-Power-RL-SetupRgstTDD
                                                   CRITICALITY ignore
                                                                         EXTENSION DL-Power
                                                                                                              PRESENCE optional
     ID id-CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD
                                                   CRITICALITY ignore
                                                                         EXTENSION DL-Power
                                                                                                              PRESENCE optional
     ID id-CCTrCH-Minimum-DL-Power-RL-SetupRgstTDD
                                                   CRITICALITY ignore
                                                                         EXTENSION DL-Power
                                                                                                              PRESENCE optional
     ID id-DL-DPCH-768-Information-RL-SetupRgstTDD
                                                   CRITICALITY notify
                                                                         EXTENSION DL-DPCH-768-Information-RL-SetupRgstTDD
   PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
   . . .
CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD
CCTrCH-TPCItem-RL-SetupRqstTDD
                             ::= SEQUENCE {
   cCTrCH-ID
                                        CCTrCH-ID.
                                        ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                              OPTIONAL,
CCTrCH-TPCItem-RL-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}
DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
   { ID id-DL-DPCH-InformationList-RL-SetupRgstTDD
                                                 CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-SetupRgstTDD
                                                                                                                            PRESENCE
mandatory }
DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
```

```
dL-Timeslot-Information
                                        DL-Timeslot-Information,
   iE-Extensions
                                        OPTIONAL.
   . . .
DL-DPCH-InformationItem-RL-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-LCR-Information-RL-SetupRgstTDD ::= SEQUENCE {
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
   dL-TimeslotLCR-Information
                                        DL-TimeslotLCR-Information.
   tstdIndicator
                                        TSTD-Indicator,
   iE-Extensions
                                        ProtocolExtensionContainer { { DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-768-Information-RL-SetupRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
   dL-Timeslot768-Information
                                        DL-Timeslot768-Information,
   iE-Extensions
                                        ProtocolExtensionContainer { { DL-DPCH-768-InformationItem-RL-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
DL-DPCH-768-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Information-RL-SetupRgstTDD ::= SEQUENCE
   rL-ID
                                        RL-ID,
   c-ID
                                        C-ID,
   frameOffset.
                                        FrameOffset,
   specialBurstScheduling
                                        SpecialBurstScheduling,
   initialDL-transmissionPower
                                        DL-Power,
   maximumDL-power
                                        DL-Power,
   minimumDL-power
                                        DL-Power,
   dL-TimeSlotISCPInfo
                                        DL-TimeslotISCPInfo OPTIONAL, -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only
                                        ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                               OPTIONAL,
RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   EXTENSION DL-TimeslotISCPInfoLCR
                                                                                                                             PRESENCE
optional }|
```

```
-- Applicable to 1.28Mcps TDD only
   { ID id-RL-Specific-DCH-Info
                                                   CRITICALITY ignore
                                                                          EXTENSION RL-Specific-DCH-Info
                                                                                                                             PRESENCE
optional }|
   { ID id-DelayedActivation
                                                   CRITICALITY reject
                                                                          EXTENSION DelayedActivation
                                                                                                                             PRESENCE
optional }|
   { ID id-UL-Synchronisation-Parameters-LCR
                                                   CRITICALITY reject
                                                                          EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                                      PRESENCE optional } |
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
   { ID id-UARFCNforNt
                                                   CRITICALITY reject
                                                                          EXTENSION UARFON
                                                                                                                             PRESENCE
optional },
   -- Mandatory for 1.28Mcps TDD when using multiple frequencies
     *****************
-- RADIO LINK SETUP RESPONSE FDD
__ ********************
RadioLinkSetupResponseFDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                    {RadioLinkSetupResponseFDD-IEs}},
                                                   {{RadioLinkSetupResponseFDD-Extensions}}
                         ProtocolExtensionContainer
                                                                                                               OPTIONAL,
   protocolExtensions
RadioLinkSetupResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
                                                   CRITICALITY ignore TYPE CRNC-CommunicationContextID
   PRESENCE mandatory } |
   { ID id-NodeB-CommunicationContextID
                                                    CRITICALITY ignore TYPE NodeB-CommunicationContextID
   PRESENCE mandatory } |
    { ID id-CommunicationControlPortID
                                                    CRITICALITY ignore TYPE CommunicationControlPortID
   PRESENCE mandatory } |
    { ID id-RL-InformationResponseList-RL-SetupRspFDD
                                                   CRITICALITY ignore TYPE RL-InformationResponseList-RL-SetupRspFDD
                                                                                                                             PRESENCE
mandatory }
    { ID id-CriticalityDiagnostics
                                                   CRITICALITY ignore TYPE CriticalityDiagnostics
   PRESENCE optional },
RadioLinkSetupResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::=
    { ID id-HSDSCH-FDD-Information-Response
                                                   CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response
   PRESENCE optional } |
   { ID id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                          CRITICALITY ignore
                                                                                                           EXTENSION
   ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                      PRESENCE optional }
    PRESENCE optional },
   . . .
Additional-HS-Cell-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-Response-ItemIEs
Additional-HS-Cell-Information-Response-ItemIEs ::=SEQUENCE{
   hSPDSCH-RL-ID
                                                   RL-ID,
   hS-DSCH-FDD-Secondary-Serving-Information-Response HS-DSCH-FDD-Secondary-Serving-Information-Response,
                                 ProtocolExtensionContainer { { Additional-HS-Cell-Information-Response-ItemIEs-ExtIEs} } OPTIONAL,
   iE-Extensions
```

```
Additional-HS-Cell-Information-Response-ItemIEs-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { RL-InformationResponseItemIE-RL-
SetupRspFDD }}
RL-InformationResponseItemIE-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseItem-RL-SetupRspFDD
                                                                                                                                 PRESENCE mandatory
RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
                                                    RL-ID.
    rL-Set-ID
    received-total-wide-band-power
                                                    Received-total-wide-band-power-Value,
                                                    DiversityIndication-RL-SetupRspFDD,
    diversityIndication
    not-Used-dSCH-InformationResponseList
                                                    NULL
                                                                                     OPTIONAL.
    sSDT-SupportIndicator
                                                    SSDT-SupportIndicator,
                                                    ProtocolExtensionContainer { { RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-ActivationIndicator
                                                        CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                                        PRESENCE
optional }|
    { ID id-E-DCH-RL-Set-ID
                                                        CRITICALITY ignore EXTENSION RL-Set-ID
                PRESENCE optional }
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                        CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional }
     ID id-Initial-DL-DPCH-TimingAdjustment
                                                        CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
    PRESENCE optional }
    { ID id-HSDSCH-PreconfigurationInfo
                                                        CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
    PRESENCE optional } |
    { ID id-Non-Serving-RL-Preconfig-Info
                                                        CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
    PRESENCE optional },
DiversityIndication-RL-SetupRspFDD ::= CHOICE {
    combining
                                                Combining-RL-SetupRspFDD,
    nonCombiningOrFirstRL
                                                NonCombiningOrFirstRL-RL-SetupRspFDD
Combining-RL-SetupRspFDD ::= SEQUENCE {
    rI.-ID
    iE-Extensions
                                                ProtocolExtensionContainer { { Combining-RL-SetupRspFDD-ExtIEs} } 
                                                                                                                         OPTIONAL.
    . . .
Combining-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE
   dCH-InformationResponse
                                           DCH-InformationResponse,
   iE-Extensions
                                           ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs} }
   OPTIONAL,
NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-E-DCH-FDD-Information-Response
                                           CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                            PRESENCE optional },
   . . .
  *****************
-- RADIO LINK SETUP RESPONSE TDD
  *****************
RadioLinkSetupResponseTDD ::= SEQUENCE {
   protocolIEs ProtocolIE-Container
                                                   {{RadioLinkSetupResponseTDD-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}}
                                                                                                            OPTIONAL,
RadioLinkSetupResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CRNC-CommunicationContextID
                                               CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                          PRESENCE
mandatory } |
   { ID id-NodeB-CommunicationContextID
                                               CRITICALITY ignore TYPE NodeB-CommunicationContextID
                                                                                                                          PRESENCE
mandatory }
   { ID id-CommunicationControlPortID
                                               CRITICALITY ignore TYPE CommunicationControlPortID
                                                                                                                          PRESENCE
mandatory } |
   PRESENCE
optional }|
   -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, Not Applicable to 1.28Mcps TDD
   { ID id-CriticalityDiagnostics
                                               CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                          PRESENCE
optional },
RadioLinkSetupResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-InformationResponse-LCR-RL-SetupRspTDD CRITICALITY ignore EXTENSION RL-InformationResponse-LCR-RL-SetupRspTDD
                                                                                                                          PRESENCE
optional } | -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
     ID id-HSDSCH-TDD-Information-Response
                                             CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response
                                                                                                                   PRESENCE optional } |
    ID id-E-DCH-Information-Response
                                               CRITICALITY ignore EXTENSION E-DCH-Information-Response
optional }|
   { ID id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR
                                                                 CRITICALITY ignore EXTENSION ContinuousPacketConnectivity-DRX-Information-
ResponseLCR
              PRESENCE optional } |
   { ID id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                 CRITICALITY ignore EXTENSION HS-DSCH-Semi-PersistentScheduling-
Information-ResponseLCR
                       PRESENCE optional }|
   { ID id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                 CRITICALITY ignore EXTENSION E-DCH-Semi-PersistentScheduling-Information-
ResponseLCR PRESENCE optional } |
```

```
{ ID id-E-RNTI-For-FACH
                                                  CRITICALITY ignore EXTENSION E-RNTI
   PRESENCE optional },
    . . .
RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
    rI.-ID
                                                  RL-ID,
   uL-TimeSlot-ISCP-Info
                                                  UL-TimeSlot-ISCP-Info,
   ul-PhysCH-SF-Variation
                                                  UL-PhysCH-SF-Variation,
                                                  DCH-InformationResponseList-RL-SetupRspTDD
    dCH-InformationResponseList
                                                                                                                     OPTIONAL,
   dSCH-InformationResponseList
                                                  DSCH-InformationResponseList-RL-SetupRspTDD
                                                                                                                     OPTIONAL,
    uSCH-InformationResponseList
                                                  USCH-InformationResponseList-RL-SetupRspTDD
                                                                                                                     OPTIONAL,
                                                  ProtocolExtensionContainer { { RL-InformationResponseList-RL-SetupRspTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL.
    . . .
RL-InformationResponseList-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { | DCH-InformationResponseListIEs-RL-SetupRspTDD }}
DCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY
                                                  ignore
                                                              TYPE
                                                                      DCH-InformationResponse PRESENCE
                                                                                                                 mandatory }
DSCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspTDD }}
DSCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
USCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-SetupRspTDD }}
USCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
     ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse
                                                                                             PRESENCE mandatory }
RL-InformationResponse-LCR-RL-SetupRspTDD ::= SEQUENCE
    uL-TimeSlot-ISCP-LCR-Info
                                                  UL-TimeSlot-ISCP-LCR-Info,
    ul-PhysCH-SF-Variation
                                                  UL-PhysCH-SF-Variation,
                                                  DCH-InformationResponseList-RL-SetupRspTDD
    dCH-InformationResponseList
                                                                                                                     OPTIONAL,
    dSCH-InformationResponseList
                                                  DSCH-InformationResponseList-RL-SetupRspTDD
                                                                                                                     OPTIONAL,
   uSCH-InformationResponseList
                                                  USCH-InformationResponseList-RL-SetupRspTDD
                                                                                                                     OPTIONAL,
                                                  ProtocolExtensionContainer { { RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
-- RADIO LINK SETUP FAILURE FDD
__ ********************
RadioLinkSetupFailureFDD ::= SEOUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                        {{RadioLinkSetupFailureFDD-IEs}},
                                                       {{RadioLinkSetupFailureFDD-Extensions}}
    protocolExtensions
                           ProtocolExtensionContainer
                                                                                                                  OPTIONAL,
RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                               CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                       PRESENCE mandatory } |
     ID id-NodeB-CommunicationContextID
                                               CRITICALITY ignore TYPE NodeB-CommunicationContextID
                                                                                                                       PRESENCE conditional } |
    -- This IE shall be present if at least one of the radio links has been successfully set up
                                               CRITICALITY ignore TYPE CommunicationControlPortID
     ID id-CommunicationControlPortID
                                                                                                                      PRESENCE optional } |
     ID id-CauseLevel-RL-SetupFailureFDD
                                               CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureFDD
                                                                                                                       PRESENCE mandatory |
     ID id-CriticalityDiagnostics
                                               CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                      PRESENCE optional },
RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-SetupFailureFDD ::= CHOICE {
    generalCause
                       GeneralCauseList-RL-SetupFailureFDD,
                       RLSpecificCauseList-RL-SetupFailureFDD,
    rLSpecificCause
GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE
    cause
                                               Cause,
    iE-Extensions
                                               ProtocolExtensionContainer { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs} }
                                                                                                                                     OPTIONAL
GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-SetupFailureFDD
                                                               Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD
                                                               Successful-RL-InformationRespList-RL-SetupFailureFDD
    iE-Extensions
                                               ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs} }
                                                                                                                                     OPTIONAL.
RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-FDD-Information-Response
                                               CRITICALITY ignore
                                                                       EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                              PRESENCE optional }
     ID id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                               CRITICALITY ignore
                                                                                                                       EXTENSION
    ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                           PRESENCE optional } |
```

```
{ ID id-Additional-HS-Cell-Information-Response
                                                        CRITICALITY ignore EXTENSION Additional-HS-Cell-Information-Response-List
    PRESENCE optional },
    . . .
Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD CRITICALITY ignore
                                                                                             TYPE Unsuccessful-RL-InformationRespItem-RL-
SetupFailureFDD PRESENCE mandatory }
Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
                                        RL-ID,
    rL-ID
    cause
                                        Cause,
                                        ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container
                                                                                                                                 {{ Successful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}
Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Successful-RL-InformationRespItem-RL-SetupFailureFDD
                                                                        CRITICALITY ignore
                                                                                                 TYPE Successful-RL-InformationRespItem-RL-
SetupFailureFDD PRESENCE mandatory }
Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
   rL-ID
                                                RL-ID.
    rL-Set-ID
                                                RL-Set-ID,
    received-total-wide-band-power
                                                Received-total-wide-band-power-Value,
                                                DiversityIndication-RL-SetupFailureFDD,
    diversityIndication
    not-Used-dSCH-InformationResponseList
                                                NULL
                                                                            OPTIONAL,
    not-Used-tFCI2-BearerInformationResponse
                                                NULL
                                                                             OPTIONAL,
    sSDT-SupportIndicator
                                                SSDT-SupportIndicator,
    iE-Extensions
                                                ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-ActivationIndicator
                                                        CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                                        PRESENCE
optional }|
    { ID id-E-DCH-RL-Set-ID
                                                        CRITICALITY ignore EXTENSION RL-Set-ID
                PRESENCE optional }
      ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                        CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional }
      ID id-Initial-DL-DPCH-TimingAdjustment
                                                        CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
    PRESENCE optional } |
```

```
{ ID id-HSDSCH-PreconfigurationInfo
                                                     CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
    PRESENCE optional } |
    { ID id-Non-Serving-RL-Preconfig-Info
                                                     CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
    PRESENCE optional },
DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
    combining
                                             Combining-RL-SetupFailureFDD,
    nonCombiningOrFirstRL
                                             NonCombiningOrFirstRL-RL-SetupFailureFDD
Combining-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID
                                             RL-ID.
   iE-Extensions
                                             ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} }
                                                                                                                                OPTIONAL,
CombiningItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
    dCH-InformationResponse
                                             DCH-InformationResponse,
                                                 ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-FDD-Information-Response
                                             CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                                  PRESENCE optional },
   -- RADIO LINK SETUP FAILURE TDD
__ ********************
RadioLinkSetupFailureTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {RadioLinkSetupFailureTDD-IEs}},
                          ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}}
   protocolExtensions
                                                                                                                  OPTIONAL,
RadioLinkSetupFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
                                                 CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                  PRESENCE mandatory
     ID
           id-CauseLevel-RL-SetupFailureTDD
                                                 CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureTDD
                                                                                                                  PRESENCE mandatory
     ID
           id-CriticalityDiagnostics
                                                 CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                  PRESENCE optional
RadioLinkSetupFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
CauseLevel-RL-SetupFailureTDD ::= CHOICE {
    generalCause
                       GeneralCauseList-RL-SetupFailureTDD,
                       RLSpecificCauseList-RL-SetupFailureTDD,
    rLSpecificCause
GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
    cause
                                ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
GeneralCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-SetupFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD,
                                                            ProtocolExtensionContainer { RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs}
    iE-Extensions
    OPTIONAL,
    . . .
RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD NBAP-PROTOCOL-IES ::= {
     ID id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD CRITICALITY ignore TYPE Unsuccessful-RL-InformationResp-RL-SetupFailureTDD
    PRESENCE mandatory }
Unsuccessful-RL-InformationResp-RL-SetupFailureTDD ::= SEQUENCE {
    rL-ID
                                        RL-ID,
    cause
                                        ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
-- RADIO LINK ADDITION REQUEST FDD
```

\_\_ \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

```
RadioLinkAdditionRequestFDD ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                   {{RadioLinkAdditionRequestFDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer
                                                  {{RadioLinkAdditionRequestFDD-Extensions}}
                                                                                                                    OPTIONAL.
RadioLinkAdditionRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                               CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                             PRESENCE
                                                                                                                           mandatory
     ID id-Compressed-Mode-Deactivation-Flag
                                               CRITICALITY reject TYPE Compressed-Mode-Deactivation-Flag
                                                                                                             PRESENCE optional }
     mandatory
                                                                                                             PRESENCE
RadioLinkAdditionRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                      CRITICALITY ignore EXTENSION Initial-DL-DPCH-TimingAdjustment-Allowed
              PRESENCE optional }
   { ID id-Serving-E-DCH-RL-ID
                                               CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
   PRESENCE optional }
   { ID id-Serving-Cell-Change-CFN
                                               CRITICALITY reject EXTENSION CFN
       PRESENCE optional } |
     ID id-HS-DSCH-Serving-Cell-Change-Info
                                               CRITICALITY reject EXTENSION HS-DSCH-Serving-Cell-Change-Info
                                                                                                                    PRESENCE optional } |
     ID id-E-DPCH-Information-RL-AdditionReqFDD
                                               CRITICALITY reject EXTENSION E-DPCH-Information-RL-AdditionReqFDD
                                                                                                                    PRESENCE optional }
     ID id-E-DCH-FDD-Information
                                               CRITICALITY reject EXTENSION E-DCH-FDD-Information
                                                                                                                    PRESENCE conditional
} |
   -- This IE shall be present if E-DPCH Information is present
   { ID id-Additional-HS-Cell-Information-RL-Addition
                                                      CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Addition-List
       PRESENCE optional },
Additional-HS-Cell-Information-RL-Addition-List ::= SEOUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Addition-ItemIEs
Additional-HS-Cell-Information-RL-Addition-ItemIEs ::=SEQUENCE{
   hSPDSCH-RL-ID
                                           RL-ID,
                                           C-ID,
   c-ID
   hs-Dsch-FDD-secondary-serving-Information Hs-Dsch-FDD-secondary-serving-Information,
                                ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Addition-ItemIEs-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
Additional-HS-Cell-Information-RL-Addition-ItemIEs-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-AdditionRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-
AdditionRgstFDD}}
RL-InformationItemIE-RL-AdditionRqstFDD NBAP-PROTOCOL-IES ::= {
   PRESENCE
   mandatory}
```

```
RL-InformationItem-RL-AdditionRgstFDD ::= SEQUENCE
                                               RL-ID.
    C-TD
                                               C-ID.
   frameOffset
                                               FrameOffset,
    chipOffset
                                               ChipOffset,
    diversityControlField
                                               DiversityControlField,
    dl-CodeInformation
                                               FDD-DL-CodeInformation,
   initialDL-TransmissionPower
                                               DL-Power
                                                                              OPTIONAL,
   maximumDL-Power
                                              DL-Power
                                                                              OPTIONAL,
   minimumDL-Power
                                              DL-Power
                                                                              OPTIONAL,
   not-Used-sSDT-CellIdentity
                                              NULL
                                                                              OPTIONAL.
    transmitDiversityIndicator
                                               TransmitDiversityIndicator
                                                                              OPTIONAL.
   iE-Extensions
                                               OPTIONAL,
RL-InformationItem-RL-AdditionRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DLReferencePower
                                                       CRITICALITY ignore EXTENSION DL-Power
                                                                                                                                    PRESENCE
optional }|
    { ID id-RL-Specific-DCH-Info
                                                                                                                                    PRESENCE
                                                       CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
optional }
    { ID id-DelayedActivation
                                                                                                                                    PRESENCE
                                                       CRITICALITY reject EXTENSION DelayedActivation
optional }|
    { ID id-E-DCH-RL-Indication
                                                       CRITICALITY reject EXTENSION E-DCH-RL-Indication
                                                                                                                                    PRESENCE
optional }|
    { ID id-RL-Specific-E-DCH-Info
                                                       CRITICALITY ignore EXTENSION RL-Specific-E-DCH-Info
                                                                                                                                    PRESENCE
optional }
    { ID id-SynchronisationIndicator
                                                       CRITICALITY ignore EXTENSION SynchronisationIndicator
                                                                                                                                    PRESENCE
optional }
    { ID id-F-DPCH-SlotFormat
                                                       CRITICALITY reject EXTENSION F-DPCH-SlotFormat
       PRESENCE optional } |
    { ID id-HSDSCH-PreconfigurationSetup
                                                       CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationSetup
                                                                                                                                    PRESENCE
optional }|
    { ID id-Non-Serving-RL-Preconfig-Setup
                                                       CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
                                                                                                                                    PRESENCE
optional },
    . . .
E-DPCH-Information-RL-AdditionReqFDD ::= SEQUENCE {
   maxSet-E-DPDCHs
                                               Max-Set-E-DPDCHs,
   ul-PunctureLimit
                                               PunctureLimit,
   e-TFCS-Information
                                               E-TFCS-Information,
   e-TTI
                                               E-TTI.
   e-DPCCH-PO
                                               E-DPCCH-PO,
    e-RGCH-2-IndexStepThreshold
                                               E-RGCH-2-IndexStepThreshold,
    e-RGCH-3-IndexStepThreshold
                                               E-RGCH-3-IndexStepThreshold,
   hARO-Info-for-E-DCH
                                               HARQ-Info-for-E-DCH,
   iE-Extensions
                                               ProtocolExtensionContainer { { E-DPCH-Information-RL-AdditionRegFDD-ExtIEs} }
                                                                                                                                    OPTIONAL,
E-DPCH-Information-RL-AdditionReqFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-HSDSCH-Configured-Indicator
                                          CRITICALITY reject EXTENSION HSDSCH-Configured-Indicator
                                                                                                                     PRESENCE mandatory } |
    -- This shall be present for EDPCH configuration with HSDCH
    { ID id-MinimumReducedE-DPDCH-GainFactor
                                                  CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor PRESENCE optional },
   ****************
-- RADIO LINK ADDITION REQUEST TDD
         *****************
RadioLinkAdditionRequestTDD ::= SEQUENCE {
   protocolIEs
                           ProtocolIE-Container
                                                       {{RadioLinkAdditionRequestTDD-IEs}},
   protocolExtensions
                           ProtocolExtensionContainer
                                                      {{RadioLinkAdditionRequestTDD-Extensions}}
                                                                                                                     OPTIONAL,
RadioLinkAdditionRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID
                                                          CRITICALITY reject TYPE NodeB-CommunicationContextID
    PRESENCE mandatory } |
    { ID id-UL-CCTrCH-InformationList-RL-AdditionRgstTDD
                                                          CRITICALITY reject TYPE UL-CCTrCH-InformationList-RL-AdditionRqstTDD
                                                                                                                                    PRESENCE
optional }|
    { ID id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD
                                                          CRITICALITY reject TYPE DL-CCTrCH-InformationList-RL-AdditionRqstTDD
                                                                                                                                    PRESENCE
optional }|
    { ID id-RL-Information-RL-AdditionRgstTDD
                                                          CRITICALITY reject TYPE RL-Information-RL-AdditionRgstTDD
    PRESENCE mandatory },
RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-TDD-Information
                                          CRITICALITY reject
                                                                  EXTENSION HSDSCH-TDD-Information
                                                                                                                 PRESENCE optional
    ID id-HSDSCH-RNTI
                                          CRITICALITY reject
                                                                  EXTENSION HSDSCH-RNTI
                                                                                                                 PRESENCE conditional
                                                                                                                                           } |
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
     ID id-HSPDSCH-RL-ID
                                          CRITICALITY reject
                                                                  EXTENSION RL-ID
                                                                                                                 PRESENCE optional
                                                                  EXTENSION E-DCH-Information
                                                                                                                 PRESENCE optional
     ID id-E-DCH-Information
                                          CRITICALITY reject
     ID id-E-DCH-Serving-RL-ID
                                          CRITICALITY reject
                                                                                                                 PRESENCE optional
                                                                  EXTENSION RL-ID
     ID id-E-DCH-768-Information
                                          CRITICALITY reject
                                                                  EXTENSION E-DCH-768-Information
                                                                                                                 PRESENCE optional
     ID id-E-DCH-LCR-Information
                                          CRITICALITY reject
                                                                  EXTENSION E-DCH-LCR-Information
    PRESENCE optional }|
   { ID id-PowerControlGAP
                                          CRITICALITY ignore
                                                                  EXTENSION ControlGAP
    PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
    { ID id-ContinuousPacketConnectivity-DRX-InformationLCR
                                                                                             EXTENSION ContinuousPacketConnectivity-DRX-
                                                                      CRITICALITY reject
                       PRESENCE optional } |
InformationLCR
    { ID id-HS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                                      CRITICALITY reject
                                                                                             EXTENSION
                                                                                                             HS-DSCH-Semi-PersistentScheduling-
                   PRESENCE optional } |
Information-LCR
    { ID id-E-DCH-Semi-PersistentScheduling-Information-LCR
                                                                      CRITICALITY reject
                                                                                             EXTENSION
                                                                                                              E-DCH-Semi-PersistentScheduling-
Information-LCR
                   PRESENCE optional }
     ID id-IdleIntervalInformation
                                          CRITICALITY ignore
                                                                  EXTENSION
                                                                                  IdleIntervalInformation
                                                                                                                            PRESENCE optional } |
     ID id-UE-Selected-MBMS-Service-Information
                                                          CRITICALITY ignore
                                                                                  EXTENSION UE-Selected-MBMS-Service-Information
               PRESENCE optional }
    { ID id-HSSCCH-TPC-StepSize
                                       CRITICALITY ignore EXTENSION TDD-TPC-DownlinkStepSize PRESENCE optional
```

```
UL-CCTrCH-InformationList-RL-AdditionRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRgstTDD
UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                             CCTrCH-ID.
   uL-DPCH-Information
                                             UL-DPCH-InformationList-RL-AdditionRqstTDD
                                                                                          OPTIONAL, -- Applicable to 3.84cps TDD only
   iE-Extensions
                                             ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRgstTDD-ExtIEs} }
   OPTIONAL,
UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD CRITICALITY notify EXTENSION UL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD
                  optional } -- Applicable to 1.28cps TDD only
     ID id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRgstTDD CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR
Applicable to 1.28cps TDD only
    { ID id-UL-DPCH-InformationItem-768-RL-AdditionRgstTDD CRITICALITY notify EXTENSION UL-DPCH-InformationItem-768-RL-AdditionRgstTDD
                  optional }, -- Applicable to 7.68Mcps TDD only
       PRESENCE
UL-DPCH-InformationList-RL-AdditionRgstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationItemIE-RL-AdditionRgstTDD }}
UL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE optional }
    -- For 3.84Mcps TDD only
UL-DPCH-InformationItem-RL-AdditionRgstTDD ::= SEQUENCE
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
   tdd-DPCHOffset
                                         TDD-DPCHOffset,
   uL-Timeslot-Information
                                         UL-Timeslot-Information,
                                         ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL.
UL-DPCH-InformationItem-RL-AdditionRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
   tdd-DPCHOffset
                                         TDD-DPCHOffset,
   uL-TimeslotLCR-Information
                                         UL-TimeslotLCR-Information,
   iE-Extensions
                                         ProtocolExtensionContainer { { UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} }
   OPTIONAL,
UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
UL-DPCH-InformationItem-768-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
    tdd-DPCHOffset
                                         TDD-DPCHOffset,
   uL-Timeslot768-Information
                                         UL-Timeslot768-Information.
   iE-Extensions
                                         ProtocolExtensionContainer { { UL-DPCH-InformationItem-768-RL-AdditionRqstTDD-ExtIEs} }
   OPTIONAL,
UL-DPCH-InformationItem-768-RL-AdditionRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationList-RL-AdditionRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-AdditionRgstTDD
DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                  CCTrCH-ID,
   dL-DPCH-Information
                                  DL-DPCH-InformationList-RL-AdditionRqstTDD
                                                                                OPTIONAL, -- Applicable to 3.84Mcps TDD only
                                  ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
    . . .
DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD
                                                            CRITICALITY notify
                                                                                   EXTENSION DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD
                     optional } | -- Applicable to 1.28Mcps TDD only
    { ID id-CCTrCH-Initial-DL-Power-RL-AdditionRgstTDD
                                                             CRITICALITY ignore
                                                                                    EXTENSION DL-Power
                                                                                                                                 PRESENCE
optional }|
     ID id-TDD-TPC-DownlinkStepSize-RL-AdditionRgstTDD
                                                                                    EXTENSION TDD-TPC-DownlinkStepSize
                                                             CRITICALITY reject
                                                                                                                         PRESENCE optional
    ID id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD
                                                                                                                                 PRESENCE
                                                             CRITICALITY ignore
                                                                                    EXTENSION DL-Power
optional }|
    { ID id-CCTrCH-Minimum-DL-Power-RL-AdditionRqstTDD
                                                             CRITICALITY ignore
                                                                                    EXTENSION DL-Power
                                                                                                                                 PRESENCE
optional
          id-DL-DPCH-InformationItem-768-RL-AdditionRgstTDD
                                                            CRITICALITY notify
    { ID
                                                                                    EXTENSION DL-DPCH-InformationItem-768-RL-AdditionRgstTDD
                     optional }, -- Applicable to 7.68Mcps TDD only
    . . .
DL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}
DL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE
mandatory }
DL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
                                         RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                         RepetitionLength,
    tdd-DPCHOffset
                                         TDD-DPCHOffset,
   dL-Timeslot-Information
                                         DL-Timeslot-Information,
```

```
ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL.
   . . .
DL-DPCH-InformationItem-RL-AdditionRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                      RepetitionPeriod,
   repetitionLength
                                      RepetitionLength,
   tdd-DPCHOffset
                                      TDD-DPCHOffset,
   dL-TimeslotLCR-Information
                                      DL-TimeslotLCR-Information,
   iE-Extensions
                                      OPTIONAL,
   . . .
DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationItem-768-RL-AdditionRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                      RepetitionPeriod,
   repetitionLength
                                      RepetitionLength,
                                      TDD-DPCHOffset,
   tdd-DPCHOffset
   dL-Timeslot768-Information
                                      DL-Timeslot768-Information,
                                      iE-Extensions
   OPTIONAL,
   . . .
DL-DPCH-InformationItem-768-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Information-RL-AdditionRgstTDD ::= SEQUENCE
   rL-ID
                                         RL-ID,
   c-ID
                                         C-ID,
   frameOffset
                                         FrameOffset,
   diversityControlField
                                         DiversityControlField,
   initial-DL-Transmission-Power
                                         DL-Power
                                                           OPTIONAL,
   maximumDL-Power
                                                           OPTIONAL,
                                         DL-Power
   minimumDL-Power
                                                           OPTIONAL,
                                         DL-Power
   dL-TimeSlotISCPInfo
                                         DL-TimeslotISCPInfo OPTIONAL,
                                                                     -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only
   iE-Extensions
                                         OPTIONAL,
   . . .
RL-information-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD CRITICALITY reject EXTENSION DL-TimeslotISCPInfoLCR
                                                                                                                     PRESENCE
optional }|
```

```
-- Applicable to 1.28Mcps TDD only
     ID id-RL-Specific-DCH-Info
                                                             CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
                                                                                                                    PRESENCE
                                                                                                                                  optional
     ID id-DelayedActivation
                                                             CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional }
     ID id-UL-Synchronisation-Parameters-LCR
                                                             CRITICALITY reject EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                                                  PRESENCE
    optional } | -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    { ID id-UARFCNforNt
                                                             CRITICALITY reject EXTENSION UARFON
                                                                                                                   PRESENCE optional },
     -- Mandatory for 1.28Mcps TDD when using multiple frequencies
   ****************
-- RADIO LINK ADDITION RESPONSE FDD
          RadioLinkAdditionResponseFDD ::= SEQUENCE {
                                                      {{RadioLinkAdditionResponseFDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
                                                      {{RadioLinkAdditionResponseFDD-Extensions}}
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                                           OPTIONAL,
RadioLinkAdditionResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
                                                         CRITICALITY ignore TYPE CRNC-CommunicationContextID
    PRESENCE mandatory } |
    { ID id-RL-InformationResponseList-RL-AdditionRspFDD
                                                         CRITICALITY ignore TYPE RL-InformationResponseList-RL-AdditionRspFDD
                                                                                                                                  PRESENCE
mandatory } |
    { ID id-CriticalityDiagnostics
                                                         CRITICALITY ignore TYPE CriticalityDiagnostics
    PRESENCE optional },
    . . .
RadioLinkAdditionResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-HS-DSCH-Serving-Cell-Change-Info-Response
                                                      CRITICALITY ignore EXTENSION HS-DSCH-Serving-Cell-Change-Info-Response
       PRESENCE optional }
{ ID id-E-DCH-Serving-Cell-Change-Info-Response
                                                      CRITICALITY ignore EXTENSION E-DCH-Serving-Cell-Change-Info-Response
       PRESENCE optional } |
{ ID id-MAChs-ResetIndicator
                                                      CRITICALITY ignore EXTENSION MAChs-ResetIndicator
               PRESENCE optional }
{ ID id-Additional-HS-Cell-Change-Information-Response CRITICALITY ignore EXTENSION Additional-HS-Cell-Change-Information-Response-List
    PRESENCE optional },
    . . .
Additional-HS-Cell-Change-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Change-Information-Response-
ItemIEs
Additional-HS-Cell-Change-Information-Response-ItemIEs ::=SEQUENCE{
   hS-DSCH-Secondary-Serving-Cell-Change-Information-Response HS-DSCH-Secondary-Serving-Cell-Change-Information-Response,
   iE-Extensions
                                  ProtocolExtensionContainer { { Additional-HS-Cell-Change-Information-Response-ItemIEs-ExtIEs} } OPTIONAL,
```

```
Additional-HS-Cell-Change-Information-Response-ItemIEs-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-
RL-AdditionRspFDD }}
RL-InformationResponseItemIE-RL-AdditionRspFDD NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE
   rL-ID
                                     RL-ID,
   rL-Set-ID
                                     RL-Set-ID,
   received-total-wide-band-power
                                     Received-total-wide-band-power-Value,
   diversityIndication
                                     DiversityIndication-RL-AdditionRspFDD,
   sSDT-SupportIndicator
                                     SSDT-SupportIndicator,
   iE-Extensions
                                     ProtocolExtensionContainer { { RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} }
                                                                                                                               OPTIONAL,
RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-DL-PowerBalancing-ActivationIndicator
                                                     CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                               PRESENCE
optional }|
    { ID id-E-DCH-RL-Set-ID
                                                     CRITICALITY ignore EXTENSION RL-Set-ID
               PRESENCE optional } |
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                    CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional }
    ID id-Initial-DL-DPCH-TimingAdjustment
                                                     CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
   PRESENCE optional }
   { ID id-HSDSCH-PreconfigurationInfo
                                                     CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
   PRESENCE optional }
    { ID id-Non-Serving-RL-Preconfig-Info
                                                    CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
   PRESENCE optional },
   . . .
DiversityIndication-RL-AdditionRspFDD ::= CHOICE
   combining
                                                 Combining-RL-AdditionRspFDD,
                                                 Non-Combining-RL-AdditionRspFDD
   non-combining
Combining-RL-AdditionRspFDD ::= SEQUENCE {
   rL-ID
                                                 ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs} } }
   iE-Extensions
                                                                                                                               OPTIONAL,
CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-FDD-Information-Response
                                                    CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
   PRESENCE optional },
```

```
Non-Combining-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-InformationResponse
                                             DCH-InformationResponse,
   iE-Extensions
                                             ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspFDD-ExtIEs} } }
                                                                                                                                 OPTIONAL,
Non-CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-FDD-Information-Response
                                           CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
    PRESENCE optional },
     *****************
-- RADIO LINK ADDITION RESPONSE TDD
__ *********************
RadioLinkAdditionResponseTDD ::= SEQUENCE {
   protocolIEs
                 ProtocolIE-Container
                                                      {{RadioLinkAdditionResponseTDD-IEs}},
                                                    {{RadioLinkAdditionResponseTDD-Extensions}}
   protocolExtensions
                       ProtocolExtensionContainer
                                                                                                                  OPTIONAL,
RadioLinkAdditionResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
                                                     CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                                 PRESENCE
mandatory }|
    { ID id-RL-InformationResponse-RL-AdditionRspTDD
                                                     CRITICALITY ignore TYPE RL-InformationResponse-RL-AdditionRspTDD
                                                                                                                                 PRESENCE
                 -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, Not Applicable to 1.28Mcps TDD
    { ID id-CriticalityDiagnostics
                                                     CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                                 PRESENCE
optional
         },
    . . .
RadioLinkAdditionResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
                                                             CRITICALITY ignore
    { ID id-RL-InformationResponse-LCR-RL-AdditionRspTDD
                                                                                       EXTENSION RL-InformationResponse-LCR-RL-AdditionRspTDD
    PRESENCE optional }
                        -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    { ID id-HSDSCH-TDD-Information-Response
                                                             CRITICALITY ignore
                                                                                       EXTENSION HSDSCH-TDD-Information-Response
       PRESENCE optional |
    { ID id-E-DCH-Information-Response
                                                             CRITICALITY ignore
                                                                                       EXTENSION E-DCH-Information-Response
           PRESENCE optional }
    { ID id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR
                                                                                CRITICALITY ignore
                                                                                                              EXTENSION
ContinuousPacketConnectivity-DRX-Information-ResponseLCR
                                                                 PRESENCE optional }
     ID id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                        CRITICALITY ignore
                                                                                                              EXTENSION HS-DSCH-Semi-
PersistentScheduling-Information-ResponseLCR
                                                     PRESENCE optional }|
    { ID id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                    CRITICALITY ignore
                                                                                                              EXTENSION E-DCH-Semi-
PersistentScheduling-Information-ResponseLCR
                                                     PRESENCE optional },
RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
   uL-TimeSlot-ISCP-Info
                                             UL-TimeSlot-ISCP-Info,
```

```
UL-PhysCH-SF-Variation,
   ul-PhysCH-SF-Variation
   dCH-Information
                                              DCH-Information-RL-AdditionRspTDD
       OPTIONAL.
   dSCH-InformationResponseList
                                              DSCH-InformationResponseList-RL-AdditionRspTDD
       OPTIONAL,
   uSCH-InformationResponseList
                                              USCH-InformationResponseList-RL-AdditionRspTDD
       OPTIONAL,
   iE-Extensions
                                              ProtocolExtensionContainer { RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} }
   OPTIONAL,
    . . .
RL-InformationResponse-RL-AdditionRspTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
   diversityIndication
                                      DiversityIndication-RL-AdditionRspTDD,
                                      ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DCH-Information-RL-AdditionRspTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
   combining
                                              Combining-RL-AdditionRspTDD,
                                                                             -- Indicates whether the old Transport Bearer shall be reused or
not
    non-Combining
                                              Non-Combining-RL-AdditionRspTDD
Combining-RL-AdditionRspTDD ::= SEQUENCE {
   rI.-ID
                                              RL-ID, -- Reference RL
   iE-Extensions
                                              ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} } }
                                                                                                                                  OPTIONAL,
CombiningItem-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Non-Combining-RL-AdditionRspTDD ::= SEQUENCE {
   dCH-InformationResponse
                                              DCH-InformationResponse,
                                              iE-Extensions
   OPTIONAL,
    . . .
Non-CombiningItem-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-AdditionRspTDD }}
```

```
DSCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
USCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-AdditionRspTDD }}
USCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse
                                                                                       PRESENCE mandatory }
RL-InformationResponse-LCR-RL-AdditionRspTDD ::= SEQUENCE
   uL-TimeSlot-ISCP-InfoLCR
                                           UL-TimeSlot-ISCP-LCR-Info,
   ul-PhysCH-SF-Variation
                                           UL-PhysCH-SF-Variation,
   dCH-Information
                                           DCH-Information-RL-AdditionRspTDD
                                                                                                                            OPTIONAL,
   dSCH-InformationResponseList
                                           DSCH-InformationResponseList-RL-AdditionRspTDD
                                                                                                                            OPTIONAL,
   uSCH-InformationResponseList
                                           USCH-InformationResponseList-RL-AdditionRspTDD
                                                                                                                           OPTIONAL,
                                           iE-Extensions
                                                                                                                           OPTIONAL,
RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK ADDITION FAILURE FDD
  ******************
RadioLinkAdditionFailureFDD ::= SEQUENCE {
                        ProtocolIE-Container
                                                   {{RadioLinkAdditionFailureFDD-IEs}},
   protocolIEs
   protocolExtensions
                        ProtocolExtensionContainer
                                                  {{RadioLinkAdditionFailureFDD-Extensions}}
                                                                                                            OPTIONAL,
RadioLinkAdditionFailureFDD-IEs NBAP-PROTOCOL-IES ::=
   { ID id-CRNC-CommunicationContextID
                                               CRITICALITY ignore
                                                                    TYPE CRNC-CommunicationContextID
   PRESENCE mandatory } |
   { ID id-CauseLevel-RL-AdditionFailureFDD
                                               CRITICALITY ignore
                                                                    TYPE CauseLevel-RL-AdditionFailureFDD
   PRESENCE mandatory } |
   { ID id-CriticalityDiagnostics
                                               CRITICALITY ignore
                                                                    TYPE CriticalityDiagnostics
   PRESENCE optional },
RadioLinkAdditionFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-HS-DSCH-Serving-Cell-Change-Info-Response
                                                  CRITICALITY ignore EXTENSION HS-DSCH-Serving-Cell-Change-Info-Response
   PRESENCE optional } |
{ ID id-E-DCH-Serving-Cell-Change-Info-Response
                                                  CRITICALITY ignore EXTENSION E-DCH-Serving-Cell-Change-Info-Response
       PRESENCE optional } |
```

```
{ ID id-Additional-HS-Cell-Change-Information-Response CRITICALITY ignore EXTENSION Additional-HS-Cell-Change-Information-Response-List
        PRESENCE optional } |
{ ID id-MAChs-ResetIndicator
                                                        CRITICALITY ignore EXTENSION MAChs-ResetIndicator
                            PRESENCE optional },
CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
    generalCause
                      GeneralCauseList-RL-AdditionFailureFDD,
    rLSpecificCause
                       RLSpecificCauseList-RL-AdditionFailureFDD,
GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    iE-Extensions
                                                ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs} }
    OPTIONAL,
GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                    Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD,
    successful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                    Successful-RL-InformationRespList-RL-AdditionFailureFDD
        OPTIONAL,
                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfrLs-1)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Unsuccessful-RL-InformationRespItem-RL-
AdditionFailureFDD PRESENCE mandatory }
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
   rL-ID
                                RL-ID,
    cause
    iE-Extensions
                                ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
    OPTIONAL,
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
Successful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEOUENCE (SIZE (1..maxNrOfRLs-2)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Successful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Successful-RL-InformationRespItem-RL-
AdditionFailureFDD PRESENCE mandatory }
Successful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
                                                RL-ID.
    rL-Set-ID
                                                RL-Set-ID.
    received-total-wide-band-power
                                                Received-total-wide-band-power-Value,
    diversityIndication
                                                DiversityIndication-RL-AdditionFailureFDD,
                                                SSDT-SupportIndicator,
    sSDT-SupportIndicator
                                                ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
    iE-Extensions
        OPTIONAL,
Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-ActivationIndicator
                                                        CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                                        PRESENCE
optional }
    { ID id-E-DCH-RL-Set-ID
                                                        CRITICALITY ignore EXTENSION RL-Set-ID
                PRESENCE optional }
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                        CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional }
    { ID id-Initial-DL-DPCH-TimingAdjustment
                                                        CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
    PRESENCE optional } |
    { ID id-HSDSCH-PreconfigurationInfo
                                                        CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
    PRESENCE optional } |
    { ID id-Non-Serving-RL-Preconfig-Info
                                                        CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
    PRESENCE optional },
    . . .
DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
                                    Combining-RL-AdditionFailureFDD,
    combining
    non-Combining
                                    Non-Combining-RL-AdditionFailureFDD
Combining-RL-AdditionFailureFDD ::= SEQUENCE {
    rI.-ID
                                                RL-ID,
    iE-Extensions
                                                ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs} }
    OPTIONAL,
    . . .
CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-FDD-Information-Response
                                                        CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
    PRESENCE optional },
```

```
Non-Combining-RL-AdditionFailureFDD ::= SEQUENCE
    dCH-InformationResponse
                                              DCH-InformationResponse,
   iE-Extensions
                                              ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs} }
   OPTIONAL,
    . . .
Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-FDD-Information-Response
                                                     CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
   PRESENCE optional },
    . . .
   *****************
  RADIO LINK ADDITION FAILURE TDD
   *****************
RadioLinkAdditionFailureTDD ::= SEQUENCE {
                                                      {{RadioLinkAdditionFailureTDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
                                                     {{RadioLinkAdditionFailureTDD-Extensions}}
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                                   OPTIONAL,
RadioLinkAdditionFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
                                                     CRITICALITY ignore
                                                                            TYPE CRNC-CommunicationContextID
                                                                                                                          PRESENCE mandatory
           id-CauseLevel-RL-AdditionFailureTDD
     ID
                                                     CRITICALITY ignore
                                                                            TYPE CauseLevel-RL-AdditionFailureTDD
                                                                                                                          PRESENCE mandatory
    { ID
                                                                                                                          PRESENCE optional },
           id-CriticalityDiagnostics
                                                     CRITICALITY ignore
                                                                            TYPE CriticalityDiagnostics
    . . .
RadioLinkAdditionFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
                      GeneralCauseList-RL-AdditionFailureTDD,
   generalCause
   rLSpecificCause
                      RLSpecificCauseList-RL-AdditionFailureTDD,
GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
   iE-Extensions
                              ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs} }
                                                                                                                   OPTIONAL,
GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD
                                                              Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
   iE-Extensions
                                                              ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs} }
       OPTIONAL.
    . . .
RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-
AdditionFailureTDD } }
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD NBAP-PROTOCOL-IES ::= {
    [ ID id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD CRITICALITY ignore TYPE Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD
    PRESENCE mandatory }
Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD ::= SEQUENCE {
   rL-ID
                                  RL-ID,
   cause
                                  Cause,
   iE-Extensions
                                  ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs} }
   OPTIONAL,
Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     *******************
-- RADIO LINK RECONFIGURATION PREPARE FDD
         *****************
RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                       {{RadioLinkReconfigurationPrepareFDD-IEs}},
                                                      {{RadioLinkReconfigurationPrepareFDD-Extensions}}
   protocolExtensions
                           ProtocolExtensionContainer
                                                                                                                    OPTIONAL,
RadioLinkReconfigurationPrepareFDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID
                                                          CRITICALITY reject TYPE NodeB-CommunicationContextID
       PRESENCE mandatory } |
    { ID id-UL-DPCH-Information-RL-ReconfPrepFDD
                                                          CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfPrepFDD
       PRESENCE optional } |
    { ID id-DL-DPCH-Information-RL-ReconfPrepFDD
                                                          CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfPrepFDD
       PRESENCE optional }
    { ID id-FDD-DCHs-to-Modify
                                                          CRITICALITY reject TYPE FDD-DCHs-to-Modify
       PRESENCE optional } |
```

```
{ ID id-DCHs-to-Add-FDD
                                                         CRITICALITY reject TYPE DCH-FDD-Information
       PRESENCE optional }
     ID id-DCH-DeleteList-RL-ReconfPrepFDD
                                                         CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepFDD
       PRESENCE optional }
    { ID id-RL-InformationList-RL-ReconfPrepFDD
                                                         CRITICALITY reject TYPE RL-InformationList-RL-ReconfPrepFDD
       PRESENCE optional }
    PRESENCE optional }.
RadioLinkReconfigurationPrepareFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SignallingBearerRequestIndicator
                                                 CRITICALITY reject EXTENSION SignallingBearerRequestIndicator
                                                                                                                                 PRESENCE
optional }|
    { ID id-HSDSCH-FDD-Information
                                                 CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                                 PRESENCE
optional }|
    { ID id-HSDSCH-Information-to-Modify
                                                 CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify
                                                                                                                                 PRESENCE
optional }|
    { ID id-HSDSCH-MACdFlows-to-Add
                                                  CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                                 PRESENCE
optional }|
    { ID id-HSDSCH-MACdFlows-to-Delete
                                                 CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                                                 PRESENCE
optional }
                                                  CRITICALITY reject EXTENSION HSDSCH-RNTI
    { ID id-HSDSCH-RNTI
                                                                                                                                 PRESENCE
conditional }
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
    { ID id-HSPDSCH-RL-ID
                                                  CRITICALITY reject EXTENSION RL-ID
                                                                                                                                 PRESENCE
optional }|
    { ID id-E-DPCH-Information-RL-ReconfPrepFDD
                                                 CRITICALITY reject EXTENSION E-DPCH-Information-RL-ReconfPrepFDD
                                                                                                                                 PRESENCE
optional }
    { ID id-E-DCH-FDD-Information
                                                  CRITICALITY reject EXTENSION E-DCH-FDD-Information
                                                                                                                                 PRESENCE
optional }|
    { ID id-E-DCH-FDD-Information-to-Modify
                                                  CRITICALITY reject EXTENSION E-DCH-FDD-Information-to-Modify
                                                                                                                                 PRESENCE
optional }|
    { ID id-E-DCH-MACdFlows-to-Add
                                                  CRITICALITY reject EXTENSION E-DCH-MACdFlows-Information
                                                                                                                                 PRESENCE
optional }|
    { ID id-E-DCH-MACdFlows-to-Delete
                                                  CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-Delete
                                                                                                                                 PRESENCE
optional }|
    { ID id-Serving-E-DCH-RL-ID
                                                  CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
                                                                                                                                 PRESENCE
optional }
    { ID id-F-DPCH-Information-RL-ReconfPrepFDD
                                                  CRITICALITY reject EXTENSION F-DPCH-Information-RL-ReconfPrepFDD
                                                                                                                                 PRESENCE
optional }|
    { ID id-Fast-Reconfiguration-Mode
                                                  CRITICALITY ignore EXTENSION Fast-Reconfiguration-Mode
                                                                                                                                 PRESENCE
optional }|
    { ID id-CPC-Information
                                                 CRITICALITY reject EXTENSION CPC-Information
                                                                                                                                 PRESENCE
optional }
    { ID id-Additional-HS-Cell-Information-RL-Reconf-Prep CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Reconf-Prep
       PRESENCE optional \}.
    . . .
Additional-HS-Cell-Information-RL-Reconf-Prep ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs
Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs ::=SEQUENCE{
    hSPDSCH-RL-ID
                                                 RL-ID,
```

```
c-ID
                                                  C-ID
                                                                                                     OPTIONAL,
   hS-DSCH-FDD-Secondary-Serving-Information
                                                  HS-DSCH-FDD-Secondary-Serving-Information
                                                                                                     OPTIONAL
   hs-DscH-secondary-serving-Information-To-Modify Hs-DscH-secondary-serving-Information-To-Modify
                                                                                                     OPTIONAL.
   hS-HS-DSCH-Secondary-Serving-Remove
                                                  HS-DSCH-Secondary-Serving-Remove
                                                                                                     OPTIONAL,
   iE-Extensions
                                  ProtocolExtensionContainer { Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs-ExtIEs} } OPTIONAL,
Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs-ExtIEs
                                                             NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE
   ul-ScramblingCode
                                                  UL-ScramblingCode
                                                                                     OPTIONAL.
   ul-SIR-Target
                                                  UL-SIR
                                                                                     OPTIONAL,
   minUL-ChannelisationCodeLength
                                                  MinUL-ChannelisationCodeLength
                                                                                     OPTIONAL,
   maxNrOfUL-DPDCHs
                                                  MaxNrOfUL-DPDCHs
                                                                                     OPTIONAL,
    -- This IE shall be present if minUL-ChannelisationCodeLength Ie is set to 4
    ul-PunctureLimit
                                                  PunctureLimit
                                                                                     OPTIONAL,
                                                  TFCS
    t.FCS
                                                                                     OPTIONAL,
   ul-DPCCH-SlotFormat
                                                  UL-DPCCH-SlotFormat
                                                                                     OPTIONAL,
                                                  DiversityMode
   diversityMode
                                                                                     OPTIONAL,
   not-Used-sSDT-CellIDLength
                                                  NULL
                                                                                     OPTIONAL,
   not-Used-s-FieldLength
                                                  NULL
                                                                                     OPTIONAL,
                                                  ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional },
    . . .
DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
                                                                                     OPTIONAL,
    dl-DPCH-SlotFormat
                                                  DL-DPCH-SlotFormat
                                                                                     OPTIONAL,
    tFCI-SignallingMode
                                                                                    OPTIONAL,
                                                  TFCI-SignallingMode
    tFCI-Presence
                                                  TFCI-Presence
                                                                                     OPTIONAL,
    -- This IE shall be present if the DL DPCH Slot Format IE is set to any of the values from 12 to 16
   multiplexingPosition
                                                  MultiplexingPosition
                                                                                     OPTIONAL,
   not-Used-pDSCH-CodeMapping
                                                  NULL
                                                                                    OPTIONAL,
   not-Used-pDSCH-RL-ID
                                                  NULL
                                                                                    OPTIONAL,
   limitedPowerIncrease
                                                  LimitedPowerIncrease
                                                                                     OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { | DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
   OPTIONAL,
DL-DPCH-Information-RL-ReconfPrepFDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-Power-Information-RL-ReconfPrepFDD CRITICALITY reject EXTENSION DL-DPCH-Power-Information-RL-ReconfPrepFDD
                                                                                                                                  PRESENCE
optional },
    . . .
```

```
DL-DPCH-Power-Information-RL-ReconfPrepFDD ::= SEQUENCE {
   powerOffsetInformation
                                        PowerOffsetInformation-RL-ReconfPrepFDD,
   fdd-TPC-DownlinkStepSize
                                        FDD-TPC-DownlinkStepSize,
   innerLoopDLPCStatus
                                        InnerLoopDLPCStatus,
   iE-Extensions
                                        ProtocolExtensionContainer { { DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs } }
   OPTIONAL,
DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-ReconfPrepFDD ::= SEQUENCE {
                                        PowerOffset,
   pO1-ForTFCI-Bits
                                        PowerOffset,
   pO2-ForTPC-Bits
                                        PowerOffset,
   pO3-ForPilotBits
                                        iE-Extensions
                                                                                                                             OPTIONAL,
   . . .
PowerOffsetInformation-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD
DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
   dCH-ID
   iE-Extensions
                                                OPTIONAL,
   . . .
DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfPrepFDD }}
RL-InformationItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
   { ID
         id-RL-InformationItem-RL-ReconfPrepFDD
                                                                                     TYPE
                                                                                                           RL-InformationItem-RL-
                                                       CRITICALITY
                                                                      reject
Reconf PrepFDD
                             mandatory}
                  PRESENCE
RL-InformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
   rI.-ID
                                                RL-ID,
   dl-CodeInformation
                                                FDD-DL-CodeInformation
                                                                                         OPTIONAL,
   maxDL-Power
                                                DL-Power
                                                                                         OPTIONAL,
   minDL-Power
                                                DL-Power
                                                                                         OPTIONAL,
   not-Used-sSDT-Indication
                                                NULL
                                                                                         OPTIONAL,
   not-Used-sSDT-Cell-Identity
                                                NULL
                                                                                         OPTIONAL,
                                                TransmitDiversityIndicator
   transmitDiversityIndicator
                                                                                         OPTIONAL,
```

```
-- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and it is not set to 'none'
   iE-Extensions
                                                  OPTIONAL.
RL-InformationItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
                                                  CRITICALITY ignore EXTENSION DL-Power
    { ID id-DLReferencePower
           PRESENCE optional }
    { ID id-RL-Specific-DCH-Info
                                                  CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
       PRESENCE optional }
    { ID id-DL-DPCH-TimingAdjustment
                                                  CRITICALITY reject EXTENSION DL-DPCH-TimingAdjustment
       PRESENCE optional }
    { ID id-Primary-CPICH-Usage-for-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-for-Channel-Estimation
    PRESENCE optional }
    { ID id-Secondary-CPICH-Information-Change
                                                  CRITICALITY ignore EXTENSION Secondary-CPICH-Information-Change
                                                                                                                                   PRESENCE
optional }|
    { ID id-E-DCH-RL-Indication
                                                  CRITICALITY reject EXTENSION E-DCH-RL-Indication
       PRESENCE optional }
    { ID id-RL-Specific-E-DCH-Info
                                                  CRITICALITY ignore EXTENSION RL-Specific-E-DCH-Info
    PRESENCE optional } |
    { ID id-F-DPCH-SlotFormat
                                                  CRITICALITY reject EXTENSION F-DPCH-SlotFormat
           PRESENCE optional } |
    { ID id-HSDSCH-PreconfigurationSetup
                                                  CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationSetup
    PRESENCE optional }
    { ID id-Non-Serving-RL-Preconfig-Setup
                                                  CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
    PRESENCE optional }
    { ID id-Non-Serving-RL-Preconfig-Removal
                                                  CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
    PRESENCE optional },
E-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE
   maxSet-E-DPDCHs
                                              Max-Set-E-DPDCHs
   OPTIONAL,
   ul-PunctureLimit
                                              PunctureLimit
   OPTIONAL,
    e-TFCS-Information
                                              E-TFCS-Information
   OPTIONAL,
    e-TTI
                                              E-TTI
   OPTIONAL,
    e-DPCCH-PO
                                              E-DPCCH-PO
   OPTIONAL,
    e-RGCH-2-IndexStepThreshold
                                              E-RGCH-2-IndexStepThreshold
    OPTIONAL,
    e-RGCH-3-IndexStepThreshold
                                              E-RGCH-3-IndexStepThreshold
               OPTIONAL,
   hARQ-Info-for-E-DCH
                                              HARO-Info-for-E-DCH
               OPTIONAL,
    hSDSCH-Configured-Indicator
                                              HSDSCH-Configured-Indicator
               OPTIONAL,
    iE-Extensions
                                              ProtocolExtensionContainer { { E-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
                                                                                                                                  OPTIONAL,
```

```
E-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MinimumReducedE-DPDCH-GainFactor
                                                 CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor PRESENCE optional },
F-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
   powerOffsetInformation
                                      PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD,
    fdd-TPC-DownlinkStepSize
                                      FDD-TPC-DownlinkStepSize,
   limitedPowerIncrease
                                      LimitedPowerIncrease,
                                      InnerLoopDLPCStatus,
   innerLoopDLPCStatus
                                      ProtocolExtensionContainer { { F-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
F-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD ::= SEQUENCE {
                                      PowerOffset,
   pO2-ForTPC-Bits
   -- This IE shall be ignored by Node B
                                      ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs} }
   iE-Extensions
                                                                                                                                  OPTIONAL.
PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RADIO LINK RECONFIGURATION PREPARE TDD
  *****************
RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
                                                      {{RadioLinkReconfigurationPrepareTDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
   protocolExtensions
                          ProtocolExtensionContainer
                                                     {{RadioLinkReconfigurationPrepareTDD-Extensions}}
                                                                                                                   OPTIONAL,
RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID
                                                             CRITICALITY reject TYPE NodeB-CommunicationContextID
    PRESENCE mandatory }
    { ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                             CRITICALITY reject TYPE UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                             CRITICALITY reject TYPE UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
       PRESENCE optional }
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                             CRITICALITY reject TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
       PRESENCE optional }
    { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                             CRITICALITY reject TYPE DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional } |
```

```
{ ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                                CRITICALITY reject TYPE DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
        PRESENCE optional }
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                                CRITICALITY reject TYPE DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
       PRESENCE optional }
    { ID id-TDD-DCHs-to-Modify
                                                                CRITICALITY reject TYPE TDD-DCHs-to-Modify
    PRESENCE optional }
    { ID id-DCHs-to-Add-TDD
                                                                CRITICALITY reject TYPE DCH-TDD-Information
    PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfPrepTDD
                                                                CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepTDD
    PRESENCE optional }
    { ID id-DSCH-Information-ModifyList-RL-ReconfPrepTDD
                                                                CRITICALITY reject TYPE DSCH-Information-ModifyList-RL-ReconfPrepTDD
        PRESENCE optional } |
    { ID id-DSCHs-to-Add-TDD
                                                                CRITICALITY reject TYPE DSCH-TDD-Information
    PRESENCE optional }
    { ID id-DSCH-Information-DeleteList-RL-ReconfPrepTDD
                                                                CRITICALITY reject TYPE DSCH-Information-DeleteList-RL-ReconfPrepTDD
        PRESENCE optional }
    { ID id-USCH-Information-ModifyList-RL-ReconfPrepTDD
                                                                CRITICALITY reject TYPE USCH-Information-ModifyList-RL-ReconfPrepTDD
       PRESENCE optional } |
    { ID id-USCH-Information-Add
                                                                CRITICALITY reject TYPE USCH-Information
    PRESENCE optional } |
    { ID id-USCH-Information-DeleteList-RL-ReconfPrepTDD
                                                                CRITICALITY reject TYPE USCH-Information-DeleteList-RL-ReconfPrepTDD
        PRESENCE optional } |
    { ID id-RL-Information-RL-ReconfPrepTDD
                                                                CRITICALITY reject TYPE RL-Information-RL-ReconfPrepTDD
    PRESENCE optional }.
-- This RL Information is the for the 1st RL IE repetition
RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SignallingBearerRequestIndicator
                                                    CRITICALITY reject EXTENSION SignallingBearerRequestIndicator
    PRESENCE optional }
    { ID id-HSDSCH-TDD-Information
                                                    CRITICALITY reject EXTENSION HSDSCH-TDD-Information
    PRESENCE optional }
    { ID id-HSDSCH-Information-to-Modify
                                                    CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify
    PRESENCE optional } |
    { ID id-HSDSCH-MACdFlows-to-Add
                                                    CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
    PRESENCE optional }
    { ID id-HSDSCH-MACdFlows-to-Delete
                                                    CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
    PRESENCE optional } |
    { ID id-HSDSCH-RNTI
                                                    CRITICALITY reject EXTENSION HSDSCH-RNTI
            PRESENCE conditional }
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
    { ID id-HSPDSCH-RL-ID
                                                    CRITICALITY reject EXTENSION RL-ID
           PRESENCE optional } |
    { ID id-PDSCH-RL-ID
                                                    CRITICALITY ignore EXTENSION RL-ID
           PRESENCE optional } |
    { ID id-multiple-RL-Information-RL-ReconfPrepTDD
                                                        CRITICALITY reject EXTENSION MultipleRL-Information-RL-ReconfPrepTDD PRESENCE optional }
-- This RL Information is the for the 2nd and beyond repetition of RL information,
    { ID id-E-DCH-Information-Reconfig
                                                    CRITICALITY reject EXTENSION E-DCH-Information-Reconfig
    PRESENCE optional } |
    { ID id-E-DCH-Serving-RL-ID
                                                    CRITICALITY reject EXTENSION RL-ID
           PRESENCE optional } |
    { ID id-E-DCH-768-Information-Reconfig
                                                    CRITICALITY reject EXTENSION E-DCH-768-Information-Reconfig
    PRESENCE optional } |
```

```
{ ID id-E-DCH-LCR-Information-Reconfig
                                                 CRITICALITY reject EXTENSION E-DCH-LCR-Information-Reconfig
    PRESENCE optional } |
    { ID id-PowerControlGAP
                                                 CRITICALITY ignore EXTENSION ControlGAP
           PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    { ID id-CPC-InformationLCR
                                                 CRITICALITY reject EXTENSION CPC-InformationLCR
       PRESENCE optional }
    { ID id-IdleIntervalInformation
                                                 CRITICALITY ignore EXTENSION IdleIntervalInformation
       PRESENCE optional }
    { ID id-UE-Selected-MBMS-Service-Information
                                                 CRITICALITY ignore EXTENSION UE-Selected-MBMS-Service-Information
                                                                                                                                PRESENCE
optional }|
    { ID id-HSSCCH-TPC-StepSize
                                                 CRITICALITY ignore EXTENSION TDD-TPC-DownlinkStepSize
       PRESENCE optional }
    { ID id-HSDSCH-RNTI-For-FACH
                                                 CRITICALITY ignore EXTENSION HSDSCH-RNTI
           PRESENCE optional },
UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                                             CCTrCH-ID,
   t FCS
                                             TFCS,
   tFCI-Coding
                                             TFCI-Coding,
   punctureLimit
                                             PunctureLimit,
   ul-DPCH-InformationList
                                             UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationAddList-RL-ReconfPrepTDD
                                             ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional } -- Applicable to 1.28Mcps TDD only
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationAddList-RL-ReconfPrepTDD
                                                            CRITICALITY reject EXTENSION UL-SIR
   { ID id-UL-SIRTarget
                                                                                                              PRESENCE optional }
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
-- This Information is the for the first RL repetition, SIR Target information for RL repetitions 2 and on, should be defined in MultipleRL-UL-
DPCH-InformationAddList-RL-ReconfPrepTDD
    { ID id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR
                                                                                                                                PRESENCE
optional }|
-- This Information is the for the first RL repetition, TPCinformation for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationAddList-RL-ReconfPrepTDD
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    { ID id-RL-ID
                                                            CRITICALITY ignore EXTENSION RL-ID
                                                                                                              PRESENCE optional }
-- This is the RL ID for the first RL repetition
    { ID id-multipleRL-ul-DPCH-InformationList
                                                            CRITICALITY reject EXTENSION MultipleRL-UL-DPCH-InformationAddList-RL-
ReconfPrepTDD PRESENCE optional } |
-- This Information is the for the 2nd and beyond RL repetition,
    { ID id-UL-DPCH-768-InformationAddItemIE-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-DPCH-768-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional }, -- Applicable to 7.68Mcps TDD only, first radio link
```

```
UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory }
UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE
    repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength,
    tdd-DPCHOffset
                                          TDD-DPCHOffset,
   uL-Timeslot-Information
                                          UL-Timeslot-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
    tdd-DPCHOffset
                                          TDD-DPCHOffset,
   uL-Timeslot-InformationLCR
                                          UL-TimeslotLCR-Information,
                                          ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
MultipleRL-UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-UL-DPCH-InformationAddListIE-RL-
Reconf PrepTDD
--Includes the 2nd through the max number of radio link repetitions.
MultipleRL-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD ::= SEQUENCE
   ul-DPCH-InformationList
                                              UL-DPCH-InformationAddList-RL-ReconfPrepTDD
                                                                                             OPTIONAL,
   ul-DPCH-InformationListLCR
                                              UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD OPTIONAL.
   ul-sir-target
                                              UL-SIR
                                                                                             OPTIONAL,
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
                                              TDD-TPC-UplinkStepSize-LCR
    tDD-TPC-UplinkStepSize-LCR
                                                                                             OPTIONAL,
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    rL-ID
                                                                                             OPTIONAL,
   iE-Extensions
                                              ProtocolExtensionContainer { { MultipleRL-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs} }
       OPTIONAL,
```

```
MultipleRL-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    TD id-UL-DPCH-768-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-DPCH-768-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional },
UL-DPCH-768-InformationAddList-RL-ReconfPrepTDD ::= SEOUENCE {
    repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength,
    tdd-DPCHOffset
                                          TDD-DPCHOffset,
   uL-Timeslot-Information768
                                          UL-Timeslot768-Information,
                                          ProtocolExtensionContainer { { UL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL.
    . . .
UL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEOUENCE {
   cCTrCH-ID
                                              CCTrCH-ID,
    t.FCS
                                              TFCS
                                                                                                                 OPTIONAL.
   tFCI-Coding
                                              TFCI-Coding
                                                                                                                 OPTIONAL,
    punctureLimit
                                              PunctureLimit
                                                                                                                 OPTIONAL,
   ul-DPCH-InformationAddList
                                              UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
   ul-DPCH-InformationModifyList
                                              UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    ul-DPCH-InformationDeleteList
                                              UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
                                                                                                                 OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    iE-Extensions
                                              OPTIONAL,
    . . .
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationModify-AddList
                                                   CRITICALITY reject
                                                                          EXTENSION
                                                                                      UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
       PRESENCE optional } -- Applicable to 1.28Mcps TDD only
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifvList-RL-ReconfPrepTDD
    { ID id-UL-SIRTarget
                               CRITICALITY reject
                                                      EXTENSION
                                                                      UL-SIR
                                                                                  PRESENCE optional
    -- Applicable to 1.28Mcps TDD only.
-- This Information is the for the first RL repetition, SIR Target information for RL repetitions 2 and on, should be defined in MultipleRL-UL-
DPCH-InformationModifyList-RL-ReconfPrepTDD
    { ID id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD
                                                                                  CRITICALITY reject
                                                                                                             EXTENSION
                                                                                                                            TDD-TPC-
UplinkStepSize-LCR PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
```

```
-- This Information is the for the first RL repetition, Step Size information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    { ID id-RL-ID
                                                      CRITICALITY ignore
                                                                             EXTENSION
                                                                                            RL-ID
                                                                                                                    PRESENCE optional
                                                                                                                                         } |
-- This is the RL ID for the first RL repetition
   { ID id-multipleRL-ul-DPCH-InformationModifyList
                                                      CRITICALITY reject
                                                                             EXTENSION
                                                                                            MultipleRL-UL-DPCH-InformationModifyList-RL-
ReconfPrepTDD PRESENCE optional }
-- This DPCH Information is the for the 2nd and beyond RL repetition,
    { ID id-UL-DPCH-768-InformationModify-AddItem
                                                 CRITICALITY reject
                                                                         EXTENSION
                                                                                     UL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD
       PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
       PRESENCE mandatory }
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
    tdd-DPCHOffset
                                          TDD-DPCHOffset,
    uL-Timeslot-Information
                                          UL-Timeslot-Information,
                                          ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModifyListIEs-RL-ReconfPrepTDD
UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                            TYPE UL-DPCH-InformationModify-ModifyItem-RL-
                   PRESENCE mandatory }
ReconfPrepTDD
UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod
                                                             OPTIONAL
    repetitionLength
                                          RepetitionLength
                                                             OPTIONAL.
    tdd-DPCHOffset
                                          TDD-DPCHOffset
                                                             OPTIONAL,
    uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                         UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD
   OPTIONAL,
                                          ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
```

```
UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD
                                                            CRITICALITY reject
                                                                                    EXTENSION
                                                                                                UL-TimeslotLCR-InformationModify-ModifyList-RL-
Reconf PrepTDD
                    PRESENCE optional }
                                          -- Applicable to 1.28Mcps TDD only
    { ID id-UL-Timeslot768-Information-RL-ReconfPrepTDD
                                                            CRITICALITY reject
                                                                                     EXTENSION
                                                                                                UL-Timeslot768-InformationModify-ModifyList-RL-
ReconfPrepTDD
                    PRESENCE optional },
                                            -- Applicable to 7.68Mcps TDD only
UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD -- Applicable to 3.84Mcps TDD only
UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot
                                            TimeSlot.
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType
                                                                            OPTIONAL.
                                            TFCI-Presence
                                                                            OPTIONAL.
    tFCI-Presence
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                        UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                                        OPTIONAL.
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
Reconf PrepTDD
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
                                            DPCH-ID,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    . . .
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotLCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD -- Applicable to 1.28Mcps TDD only
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                OPTIONAL.
    tFCI-Presence
                                            TFCI-Presence
                                                                OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLCR
                                                                            UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLCR
    OPTIONAL,
                                            ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
       OPTIONAL,
    . . .
```

```
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PLCCH-Information-RL-ReconfPrepTDDLCR CRITICALITY reject
                                                                              EXTENSION PLCCHinformation
                                                                                                                       PRESENCE optional },
    . . .
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLCR ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDDLCR
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLCR ::= SEQUENCE
    dPCH-TD
                                             DPCH-ID,
    tdd-ChannelisationCodeLCR
                                             TDD-ChannelisationCodeLCR
                                                                              OPTIONAL,
    iE-Extensions
                                             ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLCR-ExtIEs} }
    OPTIONAL.
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-UL-DPCH-TimeSlotFormat-LCR PRESENCE
optional },
UL-Timeslot768-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-768-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfULTSs))
RL-ReconfPrepTDD -- Applicable to 7.68Mcps TDD only
UL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot
                                             TimeSlot,
                                             MidambleShiftAndBurstType768
    midambleShiftAndBurstType768
                                                                              OPTIONAL,
    tFCI-Presence
                                             TFCI-Presence
                                                                              OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD768
                                                                              UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD768
    OPTIONAL,
    iE-Extensions
                                             ProtocolExtensionContainer { { UL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
        OPTIONAL,
UL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD768 ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD768
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD768 ::= SEOUENCE
    dPCH-ID
                                             DPCH-ID,
    tdd-ChannelisationCode768
                                             TDD-ChannelisationCode768
                                                                              OPTIONAL,
    iE-Extensions
                                             ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD768-ExtIEs} }
    OPTIONAL,
    . . .
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD768-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

836

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UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD
UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                                TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD
                    PRESENCE mandatory }
UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
Reconf PrepTDD
UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID
    iE-Extensions
                                        ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    uL-Timeslot-InformationLCR
                                            UL-TimeslotLCR-Information,
                                            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleRL-UL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-UL-DPCH-InformationModifyListIE-RL-
Reconf PrepTDD
--Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-UL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD ::= SEQUENCE {
    ul-DPCH-InformationAddList
                                                UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL,
    ul-DPCH-InformationModifvList
                                                UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL,
    ul-DPCH-InformationDeleteList
                                                UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL,
    ul-DPCH-InformationAddListLCR
                                                UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL,
    ul-sir-target
                                                UL-SIR
                                                                                                                     OPTIONAL,
    tDD-TPC-UplinkStepSize-LCR
                                                TDD-TPC-UplinkStepSize-LCR
                                                                                                                     OPTIONAL,
                                                RL-ID
                                                                                                                     OPTIONAL,
    -- This DPCH Information is the for the 2nd and beyond RL repetitions,
    iE-Extensions
                                                ProtocolExtensionContainer { MultipleRL-UL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD-ExtIEs}
       OPTIONAL,
```

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MultipleRL-UL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
UL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                       RepetitionPeriod,
   repetitionLength
                                       RepetitionLength,
   tdd-DPCHOffset
                                       TDD-DPCHOffset,
   uL-Timeslot-Information768
                                       UL-Timeslot768-Information,
   iE-Extensions
                                       ProtocolExtensionContainer { { UL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
UL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                                           CCTrCH-ID,
   iE-Extensions
                                           ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
   . . .
UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                                               CCTrCH-ID,
   tFCS
                                               TFCS,
   tFCI-Coding
                                              TFCI-Coding,
   punctureLimit
                                              PunctureLimit,
   cCTrCH-TPCList
                                              CCTrCH-TPCAddList-RL-ReconfPrepTDD
                                                                                                        OPTIONAL,
   dl-DPCH-InformationList
                                              DL-DPCH-InformationAddList-RL-ReconfPrepTDD
                                                                                                        OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationAddList-RL-ReconfPrepTDD
   iE-Extensions
                                              OPTIONAL,
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD
                                                                CRITICALITY reject EXTENSION DL-DPCH-LCR-InformationAddList-RL-
Reconf PrepTDD
                 PRESENCE optional } -- Applicable to 1.28Mcps TDD only
```

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-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationAddList-RL-ReconfPrepTDD
    { ID id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD
                                                                      CRITICALITY ignore EXTENSION DL-Power
                                                                                                                 PRESENCE optional }|
-- This DL Power information is the for the first RL repetition, DL power information for RL repetitions 2 and on, should be defined in MultipleRL-
DL-DPCH-InformationAddList-RL-ReconfPrepTDD
    { ID id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD
                                                                      CRITICALITY reject EXTENSION TDD-TPC-DownlinkStepSize PRESENCE optional | |
-- This DL step size is the for the first RL repetition. DL step size information for RL repetitions 2 and on, should be defined in MultipleRL-DL-
DPCH-InformationAddList-RL-ReconfPrepTDD
    { ID id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                                      CRITICALITY ignore EXTENSION DL-Power
                                                                                                                 PRESENCE optional }|
-- This DL Power information is the for the first RL repetition, DL power information for RL repetitions 2 and on, should be defined in MultipleRL-
DL-DPCH-InformationAddList-RL-ReconfPrepTDD
   { ID id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                                                                                 PRESENCE optional }|
                                                                      CRITICALITY ignore EXTENSION DL-Power
-- This DL Power information is the for the first RL repetition, DL power information for RL repetitions 2 and on, should be defined in MultipleRL-
DL-DPCH-InformationAddList-RL-ReconfPrepTDD
    { ID id-RL-ID
                                                                      CRITICALITY ignore EXTENSION RL-ID
                                                                                                                 PRESENCE optional } |
-- This is the RL ID for the first RL repetition
   { ID id-multipleRL-dl-DPCH-InformationList
                                                                      CRITICALITY reject EXTENSION MultipleRL-DL-DPCH-InformationAddList-RL-
ReconfPrepTDD PRESENCE optional }
-- This DPCH Information is the for the 2nd and beyond RL repetition,
    { ID id-DL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD
                                                                      CRITICALITY reject EXTENSION DL-DPCH-768-InformationAddList-RL-
Reconf PrepTDD
                   PRESENCE optional },
                                         -- Applicable to 7.68Mcps TDD only
   . . .
CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD
                                                                                                                     -- Applicable to 3.84Mcps
TDD and 7.68Mcps TDD only
CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
   iE-Extensions
                                          OPTIONAL,
    . . .
CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}
DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                 TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory }
DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEOUENCE
                                          RepetitionPeriod.
   repetitionPeriod
   repetitionLength
                                          RepetitionLength,
                                          TDD-DPCHOffset,
    tdd-DPCHOffset
    dL-Timeslot-Information
                                          DL-Timeslot-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
    . . .
```

```
DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE {
                                            RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    dL-Timeslot-InformationLCR
                                            DL-TimeslotLCR-Information,
                                            ProtocolExtensionContainer { { DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleRL-DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-DL-DPCH-InformationAddListIE-RL-
Reconf PrepTDD
    --Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD ::= SEQUENCE
    dl-DPCH-InformationList
                                                                DL-DPCH-InformationAddList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL,
    dl-DPCH-InformationListLCR
                                                                DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL,
    cCTrCH-Initial-DL-Power
                                                                                                                     OPTIONAL.
                                                                TDD-TPC-DownlinkStepSize
    tDD-TPC-DownlinkStepSize
                                                                                                                     OPTIONAL,
    cCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                                DL-Power
                                                                                                                     OPTIONAL,
    cCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                                DL-Power
                                                                                                                     OPTIONAL,
                                                                RL-ID
    rL-ID
                                                                                                                     OPTIONAL,
                                    ProtocolExtensionContainer { { MultipleRL-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
MultipleRL-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-768-InformationAddList-RL-ReconfPrepTDD
                                                                 CRITICALITY reject EXTENSION DL-DPCH-768-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
DL-DPCH-768-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    dL-Timeslot-Information768
                                            DL-Timeslot768-Information.
   iE-Extensions
                                            ProtocolExtensionContainer { | DL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    . . .
DL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
```

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DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                                   CCTrCH-ID.
    t.FCS
                                                   TFCS
                                                                                                                  OPTIONAL.
                                                   TFCI-Coding
                                                                                                                  OPTIONAL,
    tFCI-Coding
    punctureLimit
                                                   PunctureLimit
                                                                                                                  OPTIONAL,
    cCTrCH-TPCList
                                                   CCTrCH-TPCModifyList-RL-ReconfPrepTDD
                                                                                                                 OPTIONAL,
    dl-DPCH-InformationAddList
                                                   DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                  OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    dl-DPCH-InformationModifyList
                                                   DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    dl-DPCH-InformationDeleteList
                                                   DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
                                                                                                                  OPTIONAL.
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
                                                   ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
       OPTIONAL,
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject
                                                                                          EXTENSION
                                                                                                                 DL-DPCH-LCR-InformationModify-
AddList-RL-ReconfPrepTDD
                               PRESENCE optional } -- Applicable to 1.28Mcps TDD only
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    { ID id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-TPC-DownlinkStepSize PRESENCE optional}
-- This Step Size Information is the for the first RL repetition, step size information for RL repetitions 2 and on, should be defined in
MultipleRL-DL-DPCH-InformationModifyList-RL-ReconfPrepTDD
    { ID id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                                          CRITICALITY ignore EXTENSION DL-Power
                                                                                                                      PRESENCE optional
-- This power Information is the for the first RL repetition, power information for RL repetitions 2 and on, should be defined in MultipleRL-DL-
DPCH-InformationModifyList-RL-ReconfPrepTDD
    { ID id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                                          CRITICALITY ignore EXTENSION DL-Power
                                                                                                                      PRESENCE optional
-- This power Information is the for the first RL repetition, power information for RL repetitions 2 and on, should be defined in MultipleRL-DL-
DPCH-InformationModifyList-RL-ReconfPrepTDD
    { ID id-RL-ID
                       CRITICALITY ignore
                                                              RL-ID
                                                                          PRESENCE optional
                                               EXTENSION
                                                                                              } |
-- This is the RL ID for the first RL repetition
    { ID id-multipleRL-dl-DPCH-InformationModifyList
                                                      CRITICALITY reject
                                                                              EXTENSION
                                                                                              MultipleRL-DL-DPCH-InformationModifyList-RL-
ReconfPrepTDD PRESENCE optional } |
-- This DPCH Information is the for the 2nd and beyond RL repetitions,
    { ID id-DL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD CRITICALITY reject
                                                                                                                 DL-DPCH-768-InformationModify-
AddList-RL-ReconfPrepTDD
                               PRESENCE optional }, -- Applicable to 7.68Mcps TDD only first radio link
    . . .
CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
                                        ::= SEQUENCE {
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
    cCTrCH-ID
                                           CCTrCH-ID,
                                           iE-Extensions
                                                                                                                                     OPTIONAL,
```

```
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}
-- Applicable to 3.84Mcps TDD only
DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
   TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
       PRESENCE mandatory }
DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength,
    tdd-DPCHOffset
                                          TDD-DPCHOffset,
   dL-Timeslot-Information
                                          DL-Timeslot-Information,
                                          ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModifyListIEs-RL-ReconfPrepTDD
}}
DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                            TYPE DL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD
                   PRESENCE mandatory }
DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod
                                                                     OPTIONAL,
    repetitionLength
                                          RepetitionLength
                                                                     OPTIONAL,
    tdd-DPCHOffset
                                          TDD-DPCHOffset
                                                                     OPTIONAL,
    dL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD
                                                                     DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD
   OPTIONAL,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD CRITICALITY reject
                                                                                                                    EXTENSION
                                                                                                                                          DL-
Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                             PRESENCE optional } |
    { ID id-DL-Timeslot-768-InformationModify-ModifyList-RL-ReconfPrepTDD CRITICALITY reject
                                                                                                                    EXTENSION
                                                                                                                                          DL-
Timeslot-768-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                             PRESENCE optional },
    . . .
```

```
DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD
DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                             ::= SEQUENCE {
                                            TimeSlot.
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType
                                                                                 OPTIONAL,
    tFCI-Presence
                                            TFCI-Presence
                                                                                 OPTIONAL,
    dL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                         DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD
    OPTIONAL,
                                            ProtocolExtensionContainer { { DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-
Reconf PrepTDD
DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                         ::= SEOUENCE
                                            DPCH-ID,
                                            TDD-ChannelisationCode
    tdd-ChannelisationCode
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    . . .
DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                                 ::= SEOUENCE
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                    OPTIONAL,
    tFCI-Presence
                                            TFCI-Presence
                                                                     OPTIONAL,
    dL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                             DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
    OPTIONAL,
                                            ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
       OPTIONAL,
    . . .
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                                         PRESENCE optional
                                                                                                                                                } |
    -- Applicable to 1.28Mcps TDD only
    { ID id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                                         PRESENCE optional
    -- Applicable to 1.28Mcps TDD only
```

```
DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF DL-Code-LCR-InformationModify-ModifyItem-RL-
ReconfPrepTDD
DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                             ::= SEOUENCE {
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR
                                                                            OPTIONAL,
                                            ProtocolExtensionContainer { { DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD CRITICALITY
                                                                                  reject EXTENSION TDD-DL-DPCH-TimeSlotFormat-LCR PRESENCE
optional},
DL-Timeslot-768-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-768-InformationModify-
ModifyItem-RL-ReconfPrepTDD
DL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                                 ::= SEQUENCE {
                                            TimeSlot,
    midambleShiftAndBurstTvpe
                                            MidambleShiftAndBurstTvpe
                                                                                OPTIONAL.
    tFCI-Presence
                                            TFCI-Presence
                                                                                OPTIONAL,
    dL-Code-768-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                            DL-Code-768-InformationModify-ModifyList-RL-ReconfPrepTDD
    OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
       OPTIONAL,
DL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-768-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs768)) OF DL-Code-768-InformationModify-ModifyItem-RL-
Reconf PrepTDD
DL-Code-768-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                             ::= SEQUENCE {
    dPCH-ID768
                                            DPCH-ID768,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768
                                                                            OPTIONAL.
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Code-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    . . .
DL-Code-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD
} }
```

```
DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
Reconf PrepTDD
                  PRESENCE mandatory }
DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
Reconf PrepTDD
DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   dPCH-ID
   iE-Extensions
                                             ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
   . . .
DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
   tdd-DPCHOffset
                                         TDD-DPCHOffset,
   dL-Timeslot-InformationLCR
                                         DL-TimeslotLCR-Information,
   iE-Extensions
                                         OPTIONAL,
   . . .
DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
MultipleRL-DL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-DL-DPCH-InformationModifyListIE-RL-
Reconf PrepTDD
   --Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-DL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD ::= SEQUENCE {
   dl-DPCH-InformationAddList
                                                               DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                              OPTIONAL,
   dl-DPCH-InformationModifyList
                                                               DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                              OPTIONAL,
   dl-DPCH-InformationDeleteList
                                                               DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
                                                                                                                              OPTIONAL,
   dl-DPCH-InformationAddListLCR
                                                               DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                       OPTIONAL,
   tDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD
                                                               TDD-TPC-DownlinkStepSize
           OPTIONAL,
   cCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                               DL-Power
                                                                                                                               OPTIONAL,
   cCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                               DI - Power
                                                                                                                              OPTIONAL,
   rL-ID
                                                               RL-ID
                                                                                                                              OPTIONAL,
   iE-Extensions
                                                               ProtocolExtensionContainer { MultipleRL-DL-DPCH-InformationModifyListIE-RL-
ReconfPrepTDD-ExtIEs} }
                          OPTIONAL,
   . . .
MultipleRL-DL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-DL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject
                                                                                         EXTENSION
                                                                                                                DL-DPCH-768-InformationModify-
AddList-RL-ReconfPrepTDD
                               PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
    . . .
DL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength,
   tdd-DPCHOffset
                                          TDD-DPCHOffset,
    dL-Timeslot-Information768
                                          DL-Timeslot768-Information,
                                          ProtocolExtensionContainer { { DL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                                                  CCTrCH-ID,
   iE-Extensions
                                                  ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
       OPTIONAL,
    . . .
DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD
DCH-DeleteItem-RL-ReconfPrepTDD ::= SEOUENCE
   dCH-ID
   iE-Extensions
                                              OPTIONAL,
DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD
DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE
   dscH-ID
                                              DSCH-ID,
    cCTrCH-ID
                                              CCTrCH-ID
                                                                          OPTIONAL,
    -- DL CCTrCH in which the DSCH is mapped
    transportFormatSet
                                              TransportFormatSet
                                                                          OPTIONAL,
    allocationRetentionPriority
                                              AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                              FrameHandlingPriority
                                                                          OPTIONAL,
    toAWS
                                              ToAWS
                                                                          OPTIONAL,
```

```
ToAWE
                                                                         OPTIONAL,
    toAWE
    transportBearerRequestIndicator
                                              TransportBearerRequestIndicator,
   iE-Extensions
                                              OPTIONAL.
DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID
                                      CRITICALITY ignore EXTENSION BindingID
                                                                                             PRESENCE optional
    -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                      CRITICALITY ignore EXTENSION TransportLayerAddress
                                                                                             PRESENCE optional
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlOos
                                      CRITICALITY ignore EXTENSION TnlOos
                                                                                             PRESENCE optional },
    . . .
DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD
DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dsch-ID
   iE-Extensions
                                              ProtocolExtensionContainer { { DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD
USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   uSCH-ID
                                              USCH-ID,
   transportFormatSet
                                              TransportFormatSet
                                                                         OPTIONAL,
   allocationRetentionPriority
                                              AllocationRetentionPriority OPTIONAL,
    cCTrCH-ID
                                              CCTrCH-ID
                                                                         OPTIONAL,
                                                                                    -- UL CCTrCH in which the USCH is mapped
   transportBearerRequestIndicator
                                              TransportBearerRequestIndicator,
                                              ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID
                                          CRITICALITY ignore
                                                                  EXTENSION BindingID
                                                                                                                PRESENCE optional
    -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                          CRITICALITY ignore
                                                                  EXTENSION TransportLayerAddress
                                                                                                                PRESENCE optional
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlOos
                                          CRITICALITY ignore
                                                                 EXTENSION TnlQos
                                                                                                                PRESENCE optional },
    . . .
USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD
USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
```

```
uSCH-ID
                                               USCH-ID.
   iE-Extensions
                                               ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL.
USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
MultipleRL-Information-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF RL-Information-RL-ReconfPrepTDD
--Includes the 2nd through the max number of radio link information repetitions.
RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {
   rL-ID
                                               RL-ID.
   maxDL-Power
                                               DL-Power
                                                                  OPTIONAL,
   minDL-Power
                                               DL-Power
                                                                  OPTIONAL,
   iE-Extensions
                                               ProtocolExtensionContainer { { RL-Information-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                                    OPTIONAL,
RL-Information-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-InitDL-Power
                                                       CRITICALITY ignore EXTENSION DL-Power
                                                                                                                             PRESENCE optional
     ID id-RL-Specific-DCH-Info
                                                       CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
                                                                                                                             PRESENCE optional
     ID id-UL-Synchronisation-Parameters-LCR
                                                       CRITICALITY ignore EXTENSION UL-Synchronisation-Parameters-LCR PRESENCE optional
                                                                                                                                            } |
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
     ID id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-TimeslotISCPInfoLCR
                                                                                                                             PRESENCE optional
    -- Applicable to 1.28Mcps TDD only
     ID id-UARFCNforNt
                                                       CRITICALITY reject EXTENSION UARFON
                                                                                                                             PRESENCE optional
     -- Applicable to 1.28Mcps TDD when using multiple frequencies
  *****************
-- RADIO LINK RECONFIGURATION READY
RadioLinkReconfigurationReady ::= SEQUENCE {
   protocolIEs
                           ProtocolIE-Container
                                                       {{RadioLinkReconfigurationReady-IEs}},
                                                      { RadioLinkReconfigurationReady-Extensions } }
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                                      OPTIONAL,
RadioLinkReconfigurationReady-IEs NBAP-PROTOCOL-IES ::=
    { ID id-CRNC-CommunicationContextID
                                                       CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                                    PRESENCE
mandatory } |
```

```
ID id-RL-InformationResponseList-RL-ReconfReady
                                                     CRITICALITY ignore TYPE RL-InformationResponseList-RL-ReconfReady
                                                                                                                           PRESENCE optional } |
     ID id-CriticalityDiagnostics
                                                      CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                                   PRESENCE
optional },
RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
                                                                     EXTENSION CommunicationControlPortID
    { ID id-TargetCommunicationControlPortID
                                              CRITICALITY ignore
                                                                                                                                   PRESENCE
optional }|
    { ID id-HSDSCH-FDD-Information-Response
                                              CRITICALITY ignore
                                                                      EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                           PRESENCE optional } |
    -- FDD only
   { ID id-HSDSCH-TDD-Information-Response
                                              CRITICALITY ignore
                                                                      EXTENSION HSDSCH-TDD-Information-Response
                                                                                                                           PRESENCE optional } |
    -- TDD only
    { ID id-E-DCH-Information-Response
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCH-Information-Response
                                                                                                                                   PRESENCE
optional }|
    { ID id-MAChs-ResetIndicator
                                              CRITICALITY ignore
                                                                     EXTENSION MAChs-ResetIndicator
    PRESENCE optional } |
     ID id-Fast-Reconfiguration-Permission
                                              CRITICALITY ignore
                                                                     EXTENSION Fast-Reconfiguration-Permission
                                                                                                                           PRESENCE optional } |
     ID id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                         CRITICALITY ignore
                                                                                              EXTENSION
                                                                                                             ContinuousPacketConnectivityHS-
SCCH-less-Information-Response PRESENCE optional }|
    { ID id-Additional-HS-Cell-Information-Response
                                                      CRITICALITY ignore EXTENSION Additional-HS-Cell-Information-Response-List
    PRESENCE optional }
    { ID id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR
                                                                     CRITICALITY ignore EXTENSION ContinuousPacketConnectivity-DRX-Information-
               PRESENCE optional }|
ResponseLCR
    { ID id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                     CRITICALITY ignore EXTENSION HS-DSCH-Semi-PersistentScheduling-
Information-ResponseLCR
                           PRESENCE optional }|
    { ID id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                     CRITICALITY ignore EXTENSION E-DCH-Semi-PersistentScheduling-Information-
ResponseLCR
               PRESENCE optional } |
    { ID id-E-RNTI-For-FACH
                                              CRITICALITY ignore
                                                                     EXTENSION E-RNTI
    PRESENCE optional },
    . . .
                                           ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-
RL-InformationResponseList-RL-ReconfReady
ReconfReady } }
RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
    rL-ID
                                                  RL-ID.
    dCH-InformationResponseList-RL-ReconfReady
                                                  DCH-InformationResponseList-RL-ReconfReady OPTIONAL,
    dSCH-InformationResponseList-RL-ReconfReady
                                                  DSCH-InformationResponseList-RL-ReconfReady OPTIONAL, -- TDD only
    uSCH-InformationResponseList-RL-ReconfReady
                                                  USCH-InformationResponseList-RL-ReconfReady OPTIONAL, -- TDD only
   not-Used-tFCI2-BearerInformationResponse
                                                                                             OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs} }
   OPTIONAL,
    . . .
RL-InformationResponseItem-RL-ReconfReady-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-DL-PowerBalancing-UpdatedIndicator
                                                      CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator
    PRESENCE optional } |
```

```
{ ID id-E-DCH-RL-Set-ID
                                              CRITICALITY ignore EXTENSION RL-Set-ID
             PRESENCE optional }
    ID id-E-DCH-FDD-DL-Control-Channel-Information
                                              CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional }
    ID id-E-DCH-FDD-Information-Response
                                              CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
   PRESENCE optional }
   { ID id-HSDSCH-PreconfigurationInfo
                                              CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
   PRESENCE optional }
   { ID id-Non-Serving-RL-Preconfig-Info
                                              CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
   PRESENCE optional },
   . . .
DCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfReady }}
DCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
DSCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-ReconfReady }}
DSCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
   USCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-ReconfReady }}
USCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
   ***************
-- RADIO LINK RECONFIGURATION FAILURE
  *********************
RadioLinkReconfigurationFailure ::= SEQUENCE {
                      ProtocolIE-Container
                                               {{RadioLinkReconfigurationFailure-IEs}},
   protocolIEs
                       ProtocolExtensionContainer {{RadioLinkReconfigurationFailure-Extensions}}
   protocolExtensions
                                                                                                    OPTIONAL,
   . . .
RadioLinkReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::=
    ID id-CRNC-CommunicationContextID
                                        CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                    PRESENCE mandatory
    ID id-CauseLevel-RL-ReconfFailure
                                        CRITICALITY ignore TYPE CauseLevel-RL-ReconfFailure
                                                                                                    PRESENCE mandatory }
    ID id-CriticalityDiagnostics
                                        CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                    PRESENCE optional },
RadioLinkReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-ReconfFailure ::= CHOICE {
```

```
generalCause
                  GeneralCauseList-RL-ReconfFailure,
   rLSpecificCause
                  RLSpecificCauseList-RL-ReconfFailure,
GeneralCauseList-RL-ReconfFailure ::= SEQUENCE {
   cause
                                     Cause,
   iE-Extensions
                                     ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} }
   OPTIONAL,
   . . .
GeneralCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
   rL-ReconfigurationFailureList-RL-ReconfFailure
                                            RL-ReconfigurationFailureList-RL-ReconfFailure
                                                                                              OPTIONAL,
   iE-Extensions
                                            OPTIONAL,
   . . .
RLSpecificCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-ReconfigurationFailureList-RL-ReconfFailure ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-
ReconfigurationFailureItemIE-RL-ReconfFailure}}
RL-ReconfigurationFailureItemIE-RL-ReconfFailure NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
RL-ReconfigurationFailureItem-RL-ReconfFailure ::= SEQUENCE {
   cause
   iE-Extensions
                                     OPTIONAL,
   . . .
RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RECONFIGURATION COMMIT
__ ********************
RadioLinkReconfigurationCommit ::= SEQUENCE {
```

```
{{RadioLinkReconfigurationCommit-IEs}},
                          ProtocolIE-Container
   protocolIEs
   protocolExtensions
                          ProtocolExtensionContainer
                                                    {{RadioLinkReconfigurationCommit-Extensions}}
                                                                                                                OPTIONAL,
RadioLinkReconfigurationCommit-IEs NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                                CRITICALITY ignore TYPE NodeB-CommunicationContextID
                                                                                                            PRESENCE mandatory }
                                                CRITICALITY ignore TYPE CFN
                                                                                                            PRESENCE mandatory } |
    { ID id-Active-Pattern-Sequence-Information CRITICALITY ignore TYPE Active-Pattern-Sequence-Information
                                                                                                            PRESENCE optional },
   -- FDD only
   . . .
RadioLinkReconfigurationCommit-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Fast-Reconfiguration-Mode CRITICALITY reject EXTENSION Fast-Reconfiguration-Mode PRESENCE optional }, --FDD only
  *****************
-- RADIO LINK RECONFIGURATION CANCEL
         ************
RadioLinkReconfigurationCancel ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                     {{RadioLinkReconfigurationCancel-IEs}},
                         ProtocolExtensionContainer
                                                    {{RadioLinkReconfigurationCancel-Extensions}}
   protocolExtensions
                                                                                                                OPTIONAL,
RadioLinkReconfigurationCancel-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                                CRITICALITY ignore
                                                                      TYPE NodeB-CommunicationContextID
                                                                                                                       PRESENCE mandatory
    },
   . . .
RadioLinkReconfigurationCancel-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RECONFIGURATION REQUEST FDD
  ************************
RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                    {{RadioLinkReconfigurationRequestFDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer
                                                   {{RadioLinkReconfigurationRequestFDD-Extensions}}
                                                                                                                OPTIONAL,
   . . .
RadioLinkReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
```

```
CRITICALITY reject TYPE NodeB-CommunicationContextID
    { ID id-NodeB-CommunicationContextID
    PRESENCE mandatory } |
    { ID id-UL-DPCH-Information-RL-ReconfRgstFDD
                                                            CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfRgstFDD
    PRESENCE optional } |
    { ID id-DL-DPCH-Information-RL-ReconfRqstFDD
                                                            CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfRqstFDD
    PRESENCE optional }
    { ID id-FDD-DCHs-to-Modify
                                                            CRITICALITY reject TYPE FDD-DCHs-to-Modify
    PRESENCE optional } |
    { ID id-DCHs-to-Add-FDD
                                                            CRITICALITY reject TYPE DCH-FDD-Information
    PRESENCE optional }
    { ID id-DCH-DeleteList-RL-ReconfRqstFDD
                                                           CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD
    PRESENCE optional }
    { ID id-RL-InformationList-RL-ReconfRqstFDD
                                                           CRITICALITY reject TYPE RL-InformationList-RL-ReconfRqstFDD
    PRESENCE optional } |
    { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
                                                                                                                                       PRESENCE
optional },
    . . .
RadioLinkReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SignallingBearerRequestIndicator
                                                       CRITICALITY reject EXTENSION SignallingBearerRequestIndicator
                                                                                                                                       PRESENCE
optional }|
    { ID id-HSDSCH-FDD-Information
                                                       CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                                       PRESENCE
optional }|
    { ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify-Unsynchronised
    PRESENCE optional }
    { ID id-HSDSCH-MACdFlows-to-Add
                                                       CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                                       PRESENCE
optional }|
    { ID id-HSDSCH-MACdFlows-to-Delete
                                                       CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                                                       PRESENCE
optional }|
    { ID id-HSDSCH-RNTI
                                                        CRITICALITY reject EXTENSION HSDSCH-RNTI
                                                                                                                                       PRESENCE
conditional }|
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
    { ID id-HSPDSCH-RL-ID
                                                                                                                                       PRESENCE
                                                        CRITICALITY reject EXTENSION RL-ID
optional }|
    { ID id-E-DPCH-Information-RL-ReconfRqstFDD
                                                        CRITICALITY reject EXTENSION E-DPCH-Information-RL-ReconfRqstFDD
                                                                                                                                       PRESENCE
optional }|
    { ID id-E-DCH-FDD-Information
                                                        CRITICALITY reject EXTENSION E-DCH-FDD-Information
                                                                                                                                       PRESENCE
optional }
    { ID id-E-DCH-FDD-Information-to-Modify
                                                        CRITICALITY reject EXTENSION E-DCH-FDD-Information-to-Modify
                                                                                                                                       PRESENCE
optional }|
    { ID id-E-DCH-MACdFlows-to-Add
                                                        CRITICALITY reject EXTENSION E-DCH-MACdFlows-Information
                                                                                                                                       PRESENCE
optional }|
    { ID id-E-DCH-MACdFlows-to-Delete
                                                        CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-Delete
                                                                                                                                       PRESENCE
optional }
    { ID id-Serving-E-DCH-RL-ID
                                                        CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
                                                                                                                                       PRESENCE
optional }|
    { ID id-CPC-Information
                                                        CRITICALITY reject EXTENSION CPC-Information
       PRESENCE optional }
    { ID id-NoOfTargetCellHS-SCCH-Order
                                                       CRITICALITY ignore
                                                                               EXTENSION NoOfTargetCellHS-SCCH-Order
                                                                                                                                      PRESENCE
optional}|
    { ID id-Additional-HS-Cell-Information-RL-Reconf-Req CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Reconf-Req
    PRESENCE optional },
```

```
Additional-HS-Cell-Information-RL-Reconf-Reg
                                           ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Reconf-Reg-ItemIEs
Additional-HS-Cell-Information-RL-Reconf-Reg-ItemIEs
                                                  ::=SEOUENCE{
   hSPDSCH-RL-ID
                                              RL-ID,
   C-TD
                                              C-TD
                                                                                      OPTIONAL,
   hS-DSCH-FDD-Secondary-Serving-Information
                                              HS-DSCH-FDD-Secondary-Serving-Information OPTIONAL,
   hS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised
                                                                    HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised
   OPTIONAL,
   hS-DSCH-Secondary-Serving-Remove
                                              HS-DSCH-Secondary-Serving-Remove
                                                                                      OPTIONAL,
                                ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Reconf-Req-ExtIEs} } OPTIONAL,
   iE-Extensions
Additional-HS-Cell-Information-RL-Reconf-Reg-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
   ul-TFCS
                                                             OPTIONAL,
   iE-Extensions
                                               ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} }
   OPTIONAL,
UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE
optional },
   . . .
DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
   dl-TFCS
                                               TFCS
                                                                                  OPTIONAL.
   tFCI-SignallingMode
                                              TFCI-SignallingMode
                                                                                  OPTIONAL,
   limitedPowerIncrease
                                              LimitedPowerIncrease
                                                                                  OPTIONAL,
                                               iE-Extensions
   OPTIONAL,
DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD
DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE
   dCH-ID
                                               ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs} } 
   iE-Extensions
   OPTIONAL,
```

```
DCH-DeleteItem-RL-ReconfRastFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfRqstFDD}}
RL-InformationItemIE-RL-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-ReconfRqstFDD
                                                        CRITICALITY reject
                                                                                TYPE RL-InformationItem-RL-ReconfRqstFDD
                                                                                                                                        PRESENCE
mandatory }
RL-InformationItem-RL-ReconfRgstFDD ::= SEQUENCE
    rL-ID
                                                RL-ID.
    maxDL-Power
                                                DL-Power
                                                                            OPTIONAL,
   minDL-Power
                                                DL-Power
                                                                            OPTIONAL,
    dl-CodeInformation
                                                FDD-DL-CodeInformation
                                                                            OPTIONAL,
    -- The IE shall be present if the Transmission Gap Pattern Sequence Information IE is included and the indicated Downlink Compressed Mode
method for at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".
    iE-Extensions
                                                ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstFDD-ExtIEs} }
    OPTIONAL,
    . . .
RL-InformationItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
     ID id-DLReferencePower
                                        CRITICALITY ignore
                                                                                                                                PRESENCE optional }
                                                                EXTENSION DL-Power
     ID id-RL-Specific-DCH-Info
                                        CRITICALITY ignore
                                                                EXTENSION RL-Specific-DCH-Info
                                                                                                                                PRESENCE optional
     ID id-E-DCH-RL-Indication
                                        CRITICALITY reject
                                                                                                                                PRESENCE optional
                                                                EXTENSION E-DCH-RL-Indication
     ID id-RL-Specific-E-DCH-Info
                                        CRITICALITY ignore
                                                                EXTENSION RL-Specific-E-DCH-Info
                                                                                                                                PRESENCE optional
     ID id-F-DPCH-SlotFormat
                                        CRITICALITY reject
                                                                EXTENSION F-DPCH-SlotFormat
                                                                                                                                PRESENCE optional
     ID id-HSDSCH-PreconfigurationSetup
                                           CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationSetup
                                                                                                                                PRESENCE optional }
     ID id-Non-Serving-RL-Preconfig-Setup CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
                                                                                                                                PRESENCE optional }
     ID id-Non-Serving-RL-Preconfig-Removal
                                               CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
                                                                                                                                PRESENCE optional },
    . . .
E-DPCH-Information-RL-ReconfRgstFDD ::= SEQUENCE {
    maxSet-E-DPDCHs
                                        Max-Set-E-DPDCHs
                                                                                                                                OPTIONAL,
    ul-PunctureLimit
                                        PunctureLimit
                                                                                                                                OPTIONAL,
    e-TFCS-Information
                                        E-TFCS-Information
                                                                                                                                OPTIONAL,
    e-TTI
                                        E-TTI
                                                                                                                                OPTIONAL,
                                        E-DPCCH-PO
    e-DPCCH-PO
       OPTIONAL,
    e-RGCH-2-IndexStepThreshold
                                        E-RGCH-2-IndexStepThreshold
                                                                                                                                OPTIONAL,
                                        E-RGCH-3-IndexStepThreshold
    e-RGCH-3-IndexStepThreshold
       OPTIONAL,
    hARQ-Info-for-E-DCH
                                        HARQ-Info-for-E-DCH
                                                                                                                                OPTIONAL,
    hSDSCH-Configured-Indicator
                                        HSDSCH-Configured-Indicator
                                                                                                                                OPTIONAL,
                                    ProtocolExtensionContainer { { E-DPCH-Information-RL-ReconfRgstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                OPTIONAL,
E-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-MinimumReducedE-DPDCH-GainFactor
                                                 CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor PRESENCE optional },
  -- RADIO LINK RECONFIGURATION REQUEST TDD
       RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
                                                     {{RadioLinkReconfigurationRequestTDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
                          ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}
   protocolExtensions
                                                                                                                  OPTIONAL,
RadioLinkReconfigurationRequestTDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID
                                                             CRITICALITY reject TYPE NodeB-CommunicationContextID
    PRESENCE mandatory } |
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
                                                             CRITICALITY notify TYPE UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
    PRESENCE optional }
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                             CRITICALITY notify TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
    PRESENCE optional }
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
                                                             CRITICALITY notify TYPE DL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD
    PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                             CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
    PRESENCE optional }
    { ID id-TDD-DCHs-to-Modify
                                                             CRITICALITY reject TYPE TDD-DCHs-to-Modify
    PRESENCE optional }
    { ID id-DCHs-to-Add-TDD
                                                             CRITICALITY reject TYPE DCH-TDD-Information
    PRESENCE optional }
    { ID id-DCH-DeleteList-RL-ReconfRqstTDD
                                                             CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstTDD
    PRESENCE optional }
    { ID id-RL-Information-RL-ReconfRqstTDD
                                                             CRITICALITY reject TYPE RL-Information-RL-ReconfRqstTDD
    PRESENCE optional }.
-- This RL-Information-RL-ReconfRqstTDD is the first RL information repetition in the RL-Information List. Repetition 2 and on, should be defined
in Multiple-RL-Information-RL-ReconfRqstTDD,
    . . .
RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-SignallingBearerRequestIndicator
                                                     CRITICALITY reject EXTENSION SignallingBearerRequestIndicator
                                                                                                                         PRESENCE optional }
     ID id-multiple-RL-Information-RL-ReconfRqstTDD
                                                    CRITICALITY reject EXTENSION Multiple-RL-Information-RL-ReconfRqstTDD PRESENCE optional }
--Includes the 2nd through the max number of radio link information repetitions.
    { ID id-HSDSCH-TDD-Information
                                                     CRITICALITY reject EXTENSION HSDSCH-TDD-Information
    PRESENCE optional }
    { ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify-Unsynchronised
                                                                                                                                 PRESENCE
optional }|
    { ID id-HSDSCH-MACdFlows-to-Add
                                                     CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                                 PRESENCE
optional }|
    { ID id-HSDSCH-MACdFlows-to-Delete
                                                     CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                                                 PRESENCE
optional }
   { ID id-HSDSCH-RNTI
                                                     CRITICALITY reject EXTENSION HSDSCH-RNTI
       PRESENCE conditional } |
```

```
-- The IE shall be present if HS-PDSCH RL ID IE is present.
    { ID id-HSPDSCH-RL-ID
                                                     CRITICALITY reject EXTENSION RL-ID
       PRESENCE optional }
    { ID id-E-DCH-Information-Reconfig
                                                     CRITICALITY reject EXTENSION E-DCH-Information-Reconfig
                                                                                                                                PRESENCE
optional }|
    { ID id-E-DCH-Serving-RL-ID
                                                     CRITICALITY reject EXTENSION RL-ID
       PRESENCE optional } |
     ID id-E-DCH-768-Information-Reconfig
                                                     CRITICALITY reject EXTENSION E-DCH-768-Information-Reconfig
                                                                                                                         PRESENCE optional }
     ID id-E-DCH-LCR-Information-Reconfig
                                                     CRITICALITY reject EXTENSION E-DCH-LCR-Information-Reconfig
                                                                                                                         PRESENCE optional } |
     ID id-PowerControlGAP
                                                     CRITICALITY ignore EXTENSION ControlGAP
       PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
    { ID id-CPC-InformationLCR
                                                     CRITICALITY reject EXTENSION CPC-InformationLCR
    PRESENCE optional } |
    { ID id-IdleIntervalInformation
                                                     CRITICALITY ignore EXTENSION IdleIntervalInformation
    PRESENCE optional }
    { ID id-UE-Selected-MBMS-Service-Information
                                                                                                                         PRESENCE optional } |
                                                     CRITICALITY ignore EXTENSION UE-Selected-MBMS-Service-Information
    { ID id-HSSCCH-TPC-StepSize
                                                     CRITICALITY ignore EXTENSION TDD-TPC-DownlinkStepSize
                                                                                                                                PRESENCE
optional }|
    { ID id-HSDSCH-RNTI-For-FACH
                                                     CRITICALITY ignore EXTENSION HSDSCH-RNTI
       PRESENCE optional },
UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRgstTDD}}
UL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                                 CCTrCH-ID,
   tFCS
                                                 TFCS
                                                                OPTIONAL,
   punctureLimit
                                                 PunctureLimit OPTIONAL,
   iE-Extensions
                                                 ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
       OPTIONAL,
UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-SIRTarget
                              CRITICALITY reject
                                                                            PRESENCE optional },
                                                     EXTENSION UL-SIR
    -- Applicable to 1.28Mcps TDD only
    . . .
UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRgstTDD}}
UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
                                                                    CRITICALITY notify TYPE UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD
       PRESENCE mandatory }
```

```
UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID
   iE-Extensions
                                                 ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD-ExtIEs} }
       OPTIONAL.
UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}
DL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD
                                                                CRITICALITY notify
                                                                                       TYPE DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD
    PRESENCE mandatory }
DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                                 CCTrCH-ID.
   t FCS
                                                 TFCS
                                                                OPTIONAL,
   punctureLimit
                                                 PunctureLimit
                                                                OPTIONAL,
   iE-Extensions
                                                 ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
       OPTIONAL.
DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional } -- Applicable to 1.28Mcps TDD only
ReconfRastTDD
-- This DPCH LCR Information is the for the first RL repetition, DPCH LCR information for RL repetitions 2 and on, should be defined in MultipleRL-
DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD.
    { ID id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                                  PRESENCE optional
-- This power Information is the for the first RL repetition, power information for RL repetitions 2 and on, should be defined in MultipleRL-DL-
CCTrCH-InformationModifyList-RL-ReconfRqstTDD.
    { ID id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                                  PRESENCE optional
-- This power Information is the for the first RL repetition, power information for RL repetitions 2 and on, should be defined in MultipleRL-DL-
CCTrCH-InformationModifyList-RL-ReconfRqstTDD.
    { ID id-RL-ID
                                                                                                                                       } |
                                                                    CRITICALITY ignore EXTENSION RL-ID
                                                                                                                  PRESENCE optional
-- This is the RL ID for the first RL repetition.
    { ID id-multipleRL-dl-CCTrCH-InformationModifyList-RL-ReconfRqstTDD CRITICALITY reject EXTENSION
                                                                                                             MultipleRL-DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD PRESENCE optional },
-- This CCTrCH Information is the for the 2nd and beyond RL repetitions.
MultipleRL-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-DL-CCTrCH-InformationModifyListIE-
RL-ReconfRqstTDD
--Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-DL-CCTrCH-InformationModifyListIE-RL-ReconfRqstTDD ::= SEQUENCE {
   dl-DPCH-LCR-InformationModifyList
                                                                DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD OPTIONAL,
```

. . .

```
cCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD
                                                                    DL-Power
    OPTIONAL,
    cCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD
                                                                    DL-Power
    OPTIONAL,
                                                                    RL-ID
    rL-ID
    OPTIONAL,
DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD ::= SEQUENCE
    dL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD
                                                                         DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD
    OPTIONAL,
   iE-Extensions
                                            ProtocolExtensionContainer { | DL-DPCH-LCR-InformationModify_ModifyList-RL-ReconfRgstTDD-ExtIEs} }
   OPTIONAL.
    . . .
DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfRqstTDD
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRqstTDD
                                                                 ::= SEOUENCE {
    timeSlotLCR
                                            TimeSlotLCR.
                                                        OPTIONAL,
    maxPowerLCR
                                            DL-Power
   minPowerLCR
                                            DL-Power
                                                        OPTIONAL,
                                            ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
       OPTIONAL,
    . . .
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRgstTDD}}
DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
                                                                    CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
    PRESENCE mandatory }
DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                                    CCTrCH-ID.
                                                    ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
        OPTIONAL,
    . . .
DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DCH-DeleteList-RL-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRgstTDD
DCH-DeleteItem-RL-ReconfRgstTDD ::= SEQUENCE {
    dCH-ID
                                                  DCH-ID,
                                                  ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Multiple-RL-Information-RL-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF RL-Information-RL-ReconfRgstTDD
--Includes the 2nd through the max number of radio link information repetitions.
RL-Information-RL-ReconfRgstTDD ::= SEQUENCE {
   rL-ID
                                              RL-ID,
   maxDL-Power
                                             DI-Power
                                                             OPTIONAL,
   minDL-Power
                                             DL-Power
                                                             OPTIONAL,
                                              ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
RL-InformationItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
     ID id-RL-Specific-DCH-Info
                                             CRITICALITY ignore
                                                                     EXTENSION
                                                                                RL-Specific-DCH-Info
                                                                                                                   PRESENCE optional
     ID id-UL-Synchronisation-Parameters-LCR CRITICALITY ignore
                                                                     EXTENSION
                                                                                UL-Synchronisation-Parameters-LCR
                                                                                                                   PRESENCE optional
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    ******************
-- RADIO LINK RECONFIGURATION RESPONSE
__ *********************
RadioLinkReconfigurationResponse ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {RadioLinkReconfigurationResponse-IEs}},
                          ProtocolExtensionContainer
                                                    {{RadioLinkReconfigurationResponse-Extensions}}
   protocolExtensions
                                                                                                                   OPTIONAL,
RadioLinkReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::=
         id-CRNC-CommunicationContextID
                                                         CRITICALITY ignore
                                                                                TYPE
                                                                                        CRNC-CommunicationContextID
       PRESENCE mandatory } |
           id-RL-InformationResponseList-RL-ReconfRsp
    { ID
                                                         CRITICALITY ignore
                                                                                TYPE
                                                                                        RL-InformationResponseList-RL-ReconfRsp
    PRESENCE
              optional
          id-CriticalityDiagnostics
                                                         CRITICALITY ignore
                                                                                TYPE
                                                                                        CriticalityDiagnostics
           PRESENCE
                      optional
    . . .
```

```
RadioLinkReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::=
    { ID id-TargetCommunicationControlPortID
                                                                      EXTENSION CommunicationControlPortID
                                              CRITICALITY ignore
    PRESENCE optional } |
    { ID id-HSDSCH-FDD-Information-Response
                                                                                                                                   PRESENCE
                                              CRITICALITY ignore
                                                                      EXTENSION HSDSCH-FDD-Information-Response
optional }|
    -- FDD only
    { ID id-HSDSCH-TDD-Information-Response
                                              CRITICALITY ignore
                                                                      EXTENSION HSDSCH-TDD-Information-Response
                                                                                                                                   PRESENCE
optional }|
    -- TDD only
    { ID id-E-DCH-Information-Response
                                              CRITICALITY ignore
                                                                      EXTENSION E-DCH-Information-Response
    PRESENCE optional }
    { ID id-MAChs-ResetIndicator
                                              CRITICALITY ignore
                                                                      EXTENSION MAChs-ResetIndicator
    PRESENCE optional }
    { ID id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                         CRITICALITY ignore EXTENSION ContinuousPacketConnectivityHS-SCCH-less-
Information-Response
                      PRESENCE optional }
    { ID id-Additional-HS-Cell-Information-Response
                                                      CRITICALITY ignore EXTENSION Additional-HS-Cell-Information-Response-List
    PRESENCE optional }
    { ID id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR
                                                                      CRITICALITY ignore EXTENSION ContinuousPacketConnectivity-DRX-Information-
ResponseLCR
               PRESENCE optional } |
    { ID id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                      CRITICALITY ignore EXTENSION HS-DSCH-Semi-PersistentScheduling-
Information-ResponseLCR
                          PRESENCE optional } |
    { ID id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                      CRITICALITY ignore EXTENSION E-DCH-Semi-PersistentScheduling-Information-
ResponseLCR PRESENCE optional }
    { ID id-E-RNTI-For-FACH
                                              CRITICALITY ignore
                                                                      EXTENSION E-RNTI
       PRESENCE optional },
RL-InformationResponseList-RL-ReconfRsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationResponseItemIE-RL-
ReconfRsp } }
RL-InformationResponseItemIE-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfRsp CRITICALITY ignore TYPE RL-InformationResponseItem-RL-ReconfRsp
                                                                                                                    PRESENCE mandatory }
RL-InformationResponseItem-RL-ReconfRsp ::= SEQUENCE {
                                              RL-ID,
    dCH-InformationResponseList-RL-ReconfRsp
                                              DCH-InformationResponseList-RL-ReconfRsp
       OPTIONAL,
                                              iE-Extensions
    OPTIONAL,
RL-InformationResponseItem-RL-ReconfRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-UpdatedIndicator
                                                      CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator
    PRESENCE optional }
    -- FDD only
    { ID id-E-DCH-RL-Set-ID
                                                      CRITICALITY ignore EXTENSION RL-Set-ID
    PRESENCE optional }
    { ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                      CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional }
```

```
{ ID id-E-DCH-FDD-Information-Response
                                                    CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
   PRESENCE optional }
   { ID id-HSDSCH-PreconfigurationInfo
                                                    CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
   PRESENCE optional }
    { ID id-Non-Serving-RL-Preconfig-Info
                                                    CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
   PRESENCE optional },
DCH-InformationResponseList-RL-ReconfRsp::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfRsp }}
DCH-InformationResponseListIEs-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY ignore
                                                       TYPE DCH-InformationResponse
                                                                                     PRESENCE mandatory }
           ******************
-- RADIO LINK DELETION REOUEST
  ******************
RadioLinkDeletionRequest ::= SEQUENCE {
                                                    {{RadioLinkDeletionRequest-IEs}},
   protocolIEs
                         ProtocolIE-Container
   protocolExtensions
                         ProtocolExtensionContainer
                                                    {{RadioLinkDeletionRequest-Extensions}}
                                                                                                           OPTIONAL,
RadioLinkDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                                       CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                                             PRESENCE
    { ID
mandatory } |
   { ID
           id-CRNC-CommunicationContextID
                                                       CRITICALITY reject TYPE CRNC-CommunicationContextID
                                                                                                                             PRESENCE
mandatory } |
    { ID
           id-RL-informationList-RL-DeletionRgst
                                                       CRITICALITY notify TYPE RL-informationList-RL-DeletionRqst
                                                                                                                      PRESENCE mandatory
RadioLinkDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-informationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-informationItemIE-RL-DeletionRqst}}
RL-informationItemIE-RL-DeletionRqst NBAP-PROTOCOL-IES ::= {
    { ID id-RL-informationItem-RL-DeletionRqst
                                                CRITICALITY notify
                                                                         TYPE RL-informationItem-RL-DeletionRgst PRESENCE mandatory }
RL-informationItem-RL-DeletionRqst ::= SEQUENCE
                                            iE-Extensions
                                                                                                                             OPTIONAL
```

```
RL-informationItem-RL-DeletionRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK DELETION RESPONSE
  *****************
RadioLinkDeletionResponse ::= SEQUENCE {
   protocolIEs
                ProtocolIE-Container
                                                     {{RadioLinkDeletionResponse-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer
                                                   {{RadioLinkDeletionResponse-Extensions}}
                                                                                                                 OPTIONAL.
RadioLinkDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                 CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                               PRESENCE
   mandatory } |
   { ID id-CriticalityDiagnostics
                                                CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                               PRESENCE
   optional },
RadioLinkDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
        ****************
-- DL POWER CONTROL REQUEST FDD
__ *******************************
DL-PowerControlRequest ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                                     {{DL-PowerControlRequest-IEs}},
                       ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}
   protocolExtensions
                                                                                                             OPTIONAL,
DL-PowerControlRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                             CRITICALITY ignore TYPE NodeB-CommunicationContextID
                                                                                                                               mandatory } |
                                                                                                                 PRESENCE
     ID id-PowerAdjustmentType
                                             CRITICALITY ignore TYPE PowerAdjustmentType
                                                                                                                 PRESENCE mandatory } |
    { ID id-DLReferencePower
                                             CRITICALITY ignore TYPE DL-Power
                                                                                                                 PRESENCE conditional } |
   -- This IE shall be present if the Adjustment Type IE is set to 'Common'
   { ID id-InnerLoopDLPCStatus
                                             CRITICALITY ignore TYPE InnerLoopDLPCStatus
                                                                                                                 PRESENCE
                                                                                                                               optional }|
   { ID id-DLReferencePowerList-DL-PC-Rqst
                                             CRITICALITY ignore TYPE DL-ReferencePowerInformationList-DL-PC-Rqst
                                                                                                                 PRESENCE conditional } |
   -- This IE shall be present if the Adjustment Type IE is set to 'Individual'
   { ID id-MaxAdjustmentStep
                                             CRITICALITY ignore TYPE MaxAdjustmentStep
                                                                                                                 PRESENCE conditional }
   -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
   { ID id-AdjustmentPeriod
                                             CRITICALITY ignore TYPE AdjustmentPeriod
                                                                                                                 PRESENCE conditional }
   -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
   { ID id-AdjustmentRatio
                                             CRITICALITY ignore TYPE ScaledAdjustmentRatio
                                                                                                                 PRESENCE conditional },
```

```
-- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
DL-PowerControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
DL-ReferencePowerInformationList-DL-PC-Rgst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{DL-
ReferencePowerInformationItemIE-DL-PC-Rgst }}
DL-ReferencePowerInformationItemIE-DL-PC-Rgst NBAP-PROTOCOL-IES ::= {
    { ID id-DL-ReferencePowerInformationItem-DL-PC-Rgst
                                                             CRITICALITY ignore
                                                                                         TYPE DL-ReferencePowerInformationItem-DL-PC-Rgst
    PRESENCE mandatory }
DL-ReferencePowerInformationItem-DL-PC-Rqst ::= SEQUENCE {
                                          RL-ID,
   dl-ReferencePower
                                          DL-Power,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-ReferencePowerInformationItem-DL-PC-Rgst-ExtIEs } }
   OPTIONAL,
    . . .
DL-ReferencePowerInformationItem-DL-PC-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- DL POWER TIMESLOT CONTROL REQUEST TDD
         ****************
DL-PowerTimeslotControlRequest ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{DL-PowerTimeslotControlRequest-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}
                                                                                                                    OPTIONAL,
DL-PowerTimeslotControlRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID CRITICALITY ignore
                                                                 TYPE NodeB-CommunicationContextID
                                                                                                                    PRESENCE mandatory }
    { ID id-TimeslotISCPInfo
                                          CRITICALITY ignore
                                                                                                                    PRESENCE optional },
                                                                 TYPE DL-TimeslotISCPInfo
    -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, Not Applicable to 1.28Mcps TDD
    . . .
DL-PowerTimeslotControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD
                                                     CRITICALITY ignore
                                                                                 EXTENSION
                                                                                            DL-TimeslotISCPInfoLCR
                                                                                                                           PRESENCE optional } |
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
     ID id-PrimCCPCH-RSCP-DL-PC-RqstTDD
                                                      CRITICALITY ignore
                                                                                 EXTENSION PrimaryCCPCH-RSCP
                                                                                                                           PRESENCE optional
     ID id-PrimaryCCPCH-RSCP-Delta
                                                                                 EXTENSION PrimaryCCPCH-RSCP-Delta
                                                                                                                           PRESENCE optional
                                                      CRITICALITY ignore
```

```
-- DEDICATED MEASUREMENT INITIATION REQUEST
  *****************
DedicatedMeasurementInitiationRequest ::= SEQUENCE
                        ProtocolIE-Container
                                              {{DedicatedMeasurementInitiationRequest-IEs}},
   protocolIEs
                         ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}
   protocolExtensions
                                                                                                           OPTIONAL,
DedicatedMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
    ID id-NodeB-CommunicationContextID
                                                                                                                  PRESENCE mandatory }
                                              CRITICALITY reject TYPE NodeB-CommunicationContextID
    { ID id-MeasurementID
                                              CRITICALITY reject TYPE MeasurementID
                                                                                                                  PRESENCE mandatory
   PRESENCE mandatory }
   { ID id-DedicatedMeasurementType
                                              CRITICALITY reject TYPE DedicatedMeasurementType
                                                                                                                  PRESENCE mandatory }
   { ID id-MeasurementFilterCoefficient
                                              CRITICALITY reject TYPE MeasurementFilterCoefficient
                                                                                                                  PRESENCE optional }
   { ID id-ReportCharacteristics
                                              CRITICALITY reject TYPE ReportCharacteristics
                                                                                                                  PRESENCE mandatory }
   { ID id-CFNReportingIndicator
                                              CRITICALITY reject TYPE FNReportingIndicator
                                                                                                                  PRESENCE mandatory }
                                              CRITICALITY reject TYPE CFN
   { ID id-CFN
                                                                                                                  PRESENCE optional }
DedicatedMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-NumberOfReportedCellPortions
                                              CRITICALITY reject EXTENSION NumberOfReportedCellPortions
                                                                                                                  PRESENCE conditional
   -- The IE shall be present if the Dedicated Measurement Type IE is set to 'Best Cell Portions', FDD only.
   { ID id-MeasurementRecoveryBehavior
                                              CRITICALITY ignore EXTENSION MeasurementRecoveryBehavior
   PRESENCE optional }|
     ID id-AlternativeFormatReportingIndicator
                                              CRITICALITY ignore EXTENSION AlternativeFormatReportingIndicator
                                                                                                                  PRESENCE optional
   },
DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
   rL
                            RL-DM-Rqst,
   rLS
                            RL-Set-DM-Rqst,
                                                  -- for FDD only
   all-RL
                            AllRL-DM-Rgst,
   all-RLS
                            AllRL-Set-DM-Rqst,
                                                  -- for FDD only
   . . .
```

```
RL-DM-Rgst ::= SEQUENCE {
   rL-InformationList
                                    RL-InformationList-DM-Rgst,
   iE-Extensions
                                    OPTIONAL.
RLItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rqst }}
RL-InformationItemIE-DM-Rgst NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
RL-InformationItem-DM-Rgst ::= SEQUENCE {
       rL-ID
                                    RL-ID,
       dPCH-ID
                                                       OPTIONAL, -- for TDD only
                                    ProtocolExtensionContainer { { RL-InformationItem-DM-Rqst-ExtIEs } }
       iE-Extensions
                                                                                                               OPTIONAL,
RL-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-PUSCH-Info-DM-Rqst
                                 CRITICALITY reject
                                                               EXTENSION
                                                                         PUSCH-Info-DM-Rqst
                                                                                                               PRESENCE optional }
   -- TDD only
   { ID id-HSSICH-Info-DM-Rgst
                                                                                                               PRESENCE optional }
                                 CRITICALITY reject
                                                               EXTENSION
                                                                         HSSICH-Info-DM-Rgst
   -- TDD only
                                                                                                               PRESENCE optional }
   { ID id-DPCH-ID768-DM-Rgst
                                 CRITICALITY reject
                                                               EXTENSION
                                                                         DPCH-ID768
   -- 7.68Mcps TDD only
   { ID id-HSSICH-InfoExt-DM-Rqst CRITICALITY reject
                                                               EXTENSION HSSICH-InfoExt-DM-Rgst
                                                                                                               PRESENCE optional },
   -- 1.28Mcps TDD only, used if the HS-SICH identity has a value larger than 31
   . . .
PUSCH-Info-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF PUSCH-ID
HSSICH-Info-DM-Rgst ::= SEOUENCE (SIZE (1..maxNrOfHSSICHs)) OF HS-SICH-ID
HSSICH-InfoExt-DM-Rqst::= SEQUENCE (SIZE (1..maxNrOfHSSICHs)) OF Extended-HS-SICH-ID
-- 1.28Mcps TDD only, used if the HS-SICH identity has a value larger than 31
RL-Set-DM-Rqst ::= SEQUENCE {
   rL-Set-InformationList-DM-Rqst
                                        RL-Set-InformationList-DM-Rqst,
   iE-Extensions
                                        ProtocolExtensionContainer { { RL-SetItem-DM-Rqst-ExtIEs } }
                                                                                                               OPTIONAL,
RL-SetItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rqst
                                        ::= SEQUENCE (SIZE(1..maxNrOfRLSets)) OF RL-Set-InformationItem-DM-Rqst
```

```
RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
   rL-Set-ID
                               RL-Set-ID.
   iE-Extensions
                               ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rgst-ExtIEs} } OPTIONAL,
RL-Set-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AllRL-DM-Rgst ::= NULL
AllRL-Set-DM-Rgst ::= NULL
__ **********************
-- DEDICATED MEASUREMENT INITIATION RESPONSE
  *****************
DedicatedMeasurementInitiationResponse ::= SEQUENCE {
                                                 {{DedicatedMeasurementInitiationResponse-IEs}},
   protocolIEs
                        ProtocolIE-Container
   protocolExtensions
                        ProtocolExtensionContainer
                                                {{DedicatedMeasurementInitiationResponse-Extensions}}
                                                                                                        OPTIONAL,
   . . .
DedicatedMeasurementInitiationResponse-IES NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                             CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                        PRESENCE mandatory
     ID id-MeasurementID
                                                                                                        PRESENCE mandatory }
                                             CRITICALITY ignore TYPE MeasurementID
     PRESENCE optional }
     ID id-CriticalityDiagnostics
                                                                                                        PRESENCE optional }
                                             CRITICALITY ignore TYPE CriticalityDiagnostics
DedicatedMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MeasurementRecoverySupportIndicator
                                           CRITICALITY ignore EXTENSION MeasurementRecoverySupportIndicator
                                                                                                              PRESENCE optional },
DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
   rL
                           RL-DM-Rsp,
   rLS
                           RL-Set-DM-Rsp, -- for FDD only
   all-RL
                           RL-DM-Rsp,
   all-RLS
                           RL-Set-DM-Rsp, -- for FDD only
   . . .
RL-DM-Rsp ::= SEQUENCE {
   rL-InformationList-DM-Rsp
                                  RL-InformationList-DM-Rsp,
                                  iE-Extensions
                                                                                                    OPTIONAL,
RLItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
RL-InformationList-DM-Rsp ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rsp }}
RL-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RL-InformationItem-DM-Rsp ::= SEQUENCE {
   rI.-ID
                               RL-ID.
   dPCH-TD
                               DPCH-ID
                                            OPTIONAL,
                                                     -- for TDD only
   dedicatedMeasurementValue
                               DedicatedMeasurementValue.
                                           OPTIONAL,
   iE-Extensions
                               OPTIONAL,
RL-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-PUSCH-Info-DM-Rsp
                            CRITICALITY reject
                                                                                              PRESENCE optional } |
                                                     EXTENSION
                                                             PUSCH-Info-DM-Rsp
   -- TDD only
   -- This PUSCH Information is the for the first PUSCH repetition, PUSCH information for PUSCH repetitions 2 and on, should be defined in
Multiple-PUSCH-InfoList-DM-Rsp.
   { ID id-HSSICH-Info-DM-Rsp
                           CRITICALITY reject
                                                     EXTENSION HS-SICH-ID
                                                                                              PRESENCE optional | |
   -- TDD only
   PRESENCE optional }
   -- Applicable to 3.84Mcps TDD only. This list of dedicated measurement values is used for the 2nd and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
   DM-Rsp PRESENCE optional }|
   -- Applicable to 1.28Mcps TDD only. This list of dedicated measurement values is used for the 2nd and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
   PRESENCE optional }|
   -- TDD only, This PUSCH information is the for the 2nd and beyond PUSCH repetitions.
   PRESENCE optional }
   -- TDD only. This list of HS-SICH measurement values is used for the 2nd and beyond measurements of a RL when multiple HS-SICH measurement
values need to be reported.
    ID id-DPCH-ID768-DM-Rsp
                            CRITICALITY reject
                                                     EXTENSION DPCH-ID768
                                                                           PRESENCE optional } |
                                                                                              -- 7.68Mcps TDD only
   ID id-multiple-DedicatedMeasurementValueList-768-TDD-DM-Rsp CRITICALITY ignore EXTENSION Multiple-DedicatedMeasurementValueList-768-TDD-
DM-Rsp PRESENCE optional }|
   -- Applicable to 7.68Mcps TDD only. This list of dedicated measurement values is used for the 2nd and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
   {ID id-Extended-HS-SICH-ID
                           CRITICALITY reject
                                                     EXTENSION Extended-HS-SICH-ID
                                                                                                          PRESENCE
optional }.
   -- 1.28Mcps TDD only, used if the HS-SICH identity has a value larger than 31
PUSCH-Info-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF PUSCH-ID
Multiple-PUSCH-InfoList-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfPUSCHs-1)) OF Multiple-PUSCH-InfoListIE-DM-Rsp
-- Includes the 2nd through the max number of PUSCH information repetitions.
```

```
Multiple-PUSCH-InfoListIE-DM-Rsp ::= SEQUENCE {
    pUSCH-ID
                                            PUSCH-ID
                                                                                                                                 OPTIONAL.
    dedicatedMeasurementValue
                                            DedicatedMeasurementValue
                                                                                                                                 OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { Multiple-PUSCH-InfoListIE-DM-Rsp-ExtIEs} } }
                                                                                                                                 OPTIONAL,
Multiple-PUSCH-InfoListIE-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Multiple-DedicatedMeasurementValueList-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfDPCHsPerRL-1)) OF Multiple-DedicatedMeasurementValueItem-TDD-DM-
Rsp
Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp ::= SEQUENCE
    dPCH-ID
                                        DPCH-ID,
    dedicatedMeasurementValue
                                        DedicatedMeasurementValue,
                                        ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp ::= SEOUENCE (SIZE (1.. maxNrOfDPCHsLCRPerRL-1)) OF Multiple-DedicatedMeasurementValueItem-
LCR-TDD-DM-Rsp
Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp ::= SEQUENCE {
                                        DPCH-ID,
    dedicatedMeasurementValue
                                        DedicatedMeasurementValue,
                                        ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Multiple-HSSICHMeasurementValueList-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfHSSICHs-1)) OF Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp
Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp ::= SEOUENCE {
   hsSICH-ID
                                        HS-SICH-ID,
    dedicatedMeasurementValue
                                        DedicatedMeasurementValue,
                                        ProtocolExtensionContainer { { Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL.
Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-HS-SICH-ID
                                                        CRITICALITY ignore EXTENSION Extended-HS-SICH-ID
                                                                                                                     PRESENCE optional },
    -- 1.28Mcps TDD only, used if the HS-SICH identity has a value larger than 31
```

```
Multiple-DedicatedMeasurementValueList-768-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfDPCHs768PerRL-1)) OF Multiple-DedicatedMeasurementValueItem-
768-TDD-DM-Rsp
Multiple-DedicatedMeasurementValueItem-768-TDD-DM-Rsp ::= SEQUENCE {
                                     DPCH-ID768,
   dedicatedMeasurementValue
                                      DedicatedMeasurementValue,
                                     ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-768-TDD-DM-Rsp-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Multiple-DedicatedMeasurementValueItem-768-TDD-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Rsp ::= SEQUENCE {
   rL-Set-InformationList-DM-Rsp
                                      RL-Set-InformationList-DM-Rsp,
   iE-Extensions
                                      ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } }
                                                                                                                  OPTIONAL,
RL-SetItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rsp }}
RL-Set-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rsp
                                          CRITICALITY ignore
                                                                    TYPE RL-Set-InformationItem-DM-Rsp
                                                                                                              PRESENCE mandatory }
RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
   rL-Set-ID
                                 RL-Set-ID,
   dedicatedMeasurementValue
                                 DedicatedMeasurementValue,
                                                     OPTIONAL,
   iE-Extensions
                                  ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rsp-ExtIEs} } OPTIONAL,
RL-Set-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    ******************
-- DEDICATED MEASUREMENT INITIATION FAILURE
  ******************
DedicatedMeasurementInitiationFailure ::= SEQUENCE {
                                                     {{DedicatedMeasurementInitiationFailure-IEs}},
   protocolIEs
                         ProtocolIE-Container
```

```
protocolExtensions
                       ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}}
                                                                                                   OPTIONAL,
DedicatedMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
         id-CRNC-CommunicationContextID
                                                                           CRNC-CommunicationContextID
                                          CRITICALITY
                                                                     TYPE
                                                                                                         PRESENCE
                                                        ignore
   mandatory } |
   { ID
        id-MeasurementID
                                          CRITICALITY
                                                        ignore
                                                                     TYPE
                                                                           MeasurementID
                                                                                                               PRESENCE
   mandatory } |
       id-Cause
   { ID
                                          CRITICALITY
                                                        ignore
                                                                     TYPE
                                                                           Cause
                                                                                                               PRESENCE
   mandatory } |
        id-CriticalityDiagnostics
   { ID
                                          CRITICALITY
                                                        ignore
                                                                     TYPE
                                                                           CriticalityDiagnostics
                                                                                                               PRESENCE
   optional },
   . . .
DedicatedMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   *****************
-- DEDICATED MEASUREMENT REPORT
__ *********************
DedicatedMeasurementReport ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                          {{DedicatedMeasurementReport-IEs}},
                      ProtocolExtensionContainer {{DedicatedMeasurementReport-Extensions}}
   protocolExtensions
                                                                                                   OPTIONAL,
DedicatedMeasurementReport-IES NBAP-PROTOCOL-IES ::= {
    ID id-CRNC-CommunicationContextID
                                           CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                   PRESENCE
                                                                                                               mandatory
    ID id-MeasurementID
                                          CRITICALITY ignore TYPE MeasurementID
                                                                                                   PRESENCE
                                                                                                               mandatory
    PRESENCE
                                                                                                               mandatory
   . . .
DedicatedMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE
optional
DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
   rL
                                RL-DM-Rprt,
   rLS
                                RL-Set-DM-Rprt,
                                                    -- for FDD only
   all-RL
                                RL-DM-Rprt,
   all-RLS
                                RL-Set-DM-Rprt,
                                                    -- for FDD only
   . . .
```

```
RL-DM-Rprt ::= SEQUENCE {
   rL-InformationList-DM-Rprt
                                    RL-InformationList-DM-Rprt,
   iE-Extensions
                                    OPTIONAL.
RLItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rprt }}
RL-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RL-InformationItem-DM-Rprt ::= SEQUENCE {
   rL-ID
                                RL-ID.
   dPCH-ID
                                DPCH-TD
                                           OPTIONAL,
                                                          -- for TDD only
   dedicatedMeasurementValueInformation DedicatedMeasurementValueInformation,
                                iE-Extensions
                                                                                                             OPTIONAL,
   . . .
RL-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-PUSCH-Info-DM-Rprt
                                CRITICALITY reject
                                                              EXTENSION PUSCH-Info-DM-Rprt
                                                                                                             PRESENCE optional }
   -- TDD only
   -- This PUSCH Information is the for the first PUSCH repetition, PUSCH information for PUSCH repetitions 2 and on, should be defined in
Multiple-PUSCH-InfoList-DM-Rprt.
   {ID id-HSSICH-Info-DM-Rprt
                                CRITICALITY reject
                                                              EXTENSION HS-SICH-ID
                                                                                                             PRESENCE optional } |
   -- TDD only
   { ID id-multiple-PUSCH-InfoList-DM-Rprt CRITICALITY ignore
                                                              EXTENSION Multiple-PUSCH-InfoList-DM-Rprt
                                                                                                                                  } |
                                                                                                             PRESENCE optional
   -- TDD only, This PUSCH information is the for the 2nd and beyond PUSCH repetitions.
   { ID id-DPCH-ID768-DM-Rprt
                                CRITICALITY reject
                                                             EXTENSION DPCH-ID768
                                                                                                             PRESENCE optional }
   -- 7.68Mcps TDD only
   { ID id-Extended-HS-SICH-ID
                                                                                                             PRESENCE optional }
                                CRITICALITY ignore
                                                             EXTENSION Extended-HS-SICH-ID
   -- 1.28Mcps TDD only, used if the HS-SICH identity has a value larger than 31
PUSCH-Info-DM-Rprt ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID
Multiple-PUSCH-InfoList-DM-Rort ::= SEOUENCE (SIZE (1.. maxNrOfPUSCHs-1)) OF Multiple-PUSCH-InfoListIE-DM-Rort
-- Includes the 2nd through the max number of PUSCH information repetitions.
Multiple-PUSCH-InfoListIE-DM-Rprt ::= SEQUENCE {
   pUSCH-ID
                                        PUSCH-ID
                                                                                                                    OPTIONAL,
   dedicatedMeasurementValue
                                        DedicatedMeasurementValue
                                                                                                                    OPTIONAL,
   iE-Extensions
                                        ProtocolExtensionContainer { { Multiple-PUSCH-InfoListIE-DM-Rprt-ExtIEs} } 
                                                                                                                    OPTIONAL,
   . . .
```

```
Multiple-PUSCH-InfoListIE-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Rprt ::= SEQUENCE {
   rL-Set-InformationList-DM-Rprt
                                  RL-Set-InformationList-DM-Rprt,
                                  iE-Extensions
                                                                                                      OPTIONAL,
RL-SetItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rprt }}
RL-Set-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
RL-Set-InformationItem-DM-Rprt ::= SEQUENCE
   dedicatedMeasurementValueInformation
                                    DedicatedMeasurementValueInformation,
   iE-Extensions
                              ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
RL-Set-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
__ *********************
-- DEDICATED MEASUREMENT TERMINATION REQUEST
  *****************
DedicatedMeasurementTerminationRequest ::= SEQUENCE {
                                                { {DedicatedMeasurementTerminationRequest-IEs} },
   protocolIEs
                       ProtocolIE-Container
   protocolExtensions
                       ProtocolExtensionContainer
                                               {{DedicatedMeasurementTerminationRequest-Extensions}}
                                                                                                      OPTIONAL,
DedicatedMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::=
         id-NodeB-CommunicationContextID
   { ID
                                            CRITICALITY
                                                          ignore
                                                                       TYPE
                                                                              NodeB-CommunicationContextID
                                                                                                                   PRESENCE
   mandatory } |
        id-MeasurementID
                                            CRITICALITY
                                                          ignore
                                                                       TYPE
                                                                              MeasurementID
                                                                                                                   PRESENCE
   mandatory },
   . . .
DedicatedMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
-- DEDICATED MEASUREMENT FAILURE INDICATION
__ ********************
DedicatedMeasurementFailureIndication ::= SEOUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                     {{DedicatedMeasurementFailureIndication-IEs}},
                          ProtocolExtensionContainer
                                                     {{DedicatedMeasurementFailureIndication-Extensions}}
   protocolExtensions
                                                                                                                  OPTIONAL,
DedicatedMeasurementFailureIndication-IES NBAP-PROTOCOL-IES ::=
           id-CRNC-CommunicationContextID
                                             CRITICALITY
                                                                                CRNC-CommunicationContextID
                                                                                                                                mandatory
                                                             ignore
                                                                        TYPE
                                                                                                                  PRESENCE
     ID
           id-MeasurementID
                                             CRITICALITY
                                                             ignore
                                                                        TYPE
                                                                                MeasurementID
                                                                                                                  PRESENCE
                                                                                                                                 mandatory
     ID
           id-Cause
                                             CRITICALITY
                                                             ignore
                                                                        TYPE
                                                                                Cause
                                                                                                                  PRESENCE
                                                                                                                                mandatory
DedicatedMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK FAILURE INDICATION
__ *********************
RadioLinkFailureIndication ::= SEQUENCE {
                                                      {{RadioLinkFailureIndication-IEs}},
   protocolIEs
                         ProtocolIE-Container
   protocolExtensions
                          ProtocolExtensionContainer {{RadioLinkFailureIndication-Extensions}}
                                                                                                                  OPTIONAL,
RadioLinkFailureIndication-IES NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                     CRITICALITY ignore
                                                                                TYPE CRNC-CommunicationContextID
                                                                                                                                 PRESENCE
   mandatory } |
   { ID
          id-Reporting-Object-RL-FailureInd
                                                     CRITICALITY ignore
                                                                                TYPE Reporting-Object-RL-FailureInd
                                                                                                                         PRESENCE
   mandatory } ,
    . . .
RadioLinkFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
Reporting-Object-RL-FailureInd ::= CHOICE {
                          RL-RL-FailureInd,
   rL-Set
                          RL-Set-RL-FailureInd, --FDD only
```

```
cCTrCH
                           CCTrCH-RL-FailureInd --TDD only
RL-RL-FailureInd ::= SEQUENCE {
   rL-InformationList-RL-FailureInd
                                          RL-InformationList-RL-FailureInd,
                                          iE-Extensions
                                                                                                                    OPTIONAL,
RLItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-FailureInd ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-FailureInd}}
RL-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-FailureInd
                                                      CRITICALITY ignore
                                                                                TYPE RL-InformationItem-RL-FailureInd
    PRESENCE mandatory }
RL-InformationItem-RL-FailureInd ::= SEQUENCE {
                                              RI-TD.
   cause
                                              ProtocolExtensionContainer { { RL-InformationItem-RL-FailureInd-ExtIEs } }
   iE-Extensions
                                                                                                                                  OPTIONAL,
RL-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-RL-FailureInd ::= SEQUENCE {
   rL-Set-InformationList-RL-FailureInd
                                          RL-Set-InformationList-RL-FailureInd,
                                          ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs } }
   iE-Extensions
                                                                                                                    OPTIONAL,
RL-SetItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-
FailureInd }}
RL-Set-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
     ID id-RL-Set-InformationItem-RL-FailureInd CRITICALITY ignore
                                                                      TYPE RL-Set-InformationItem-RL-FailureInd
                                                                                                                           PRESENCE mandatory
RL-Set-InformationItem-RL-FailureInd ::= SEQUENCE {
   rL-Set-ID
                          RL-Set-ID,
   cause
                           Cause,
                           ProtocolExtensionContainer { RL-Set-InformationItem-RL-FailureInd-ExtIEs} } OPTIONAL,
   iE-Extensions
```

```
RL-Set-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-RL-FailureInd ::= SEQUENCE {
                                   RL-ID,
                                   CCTrCH-InformationList-RL-FailureInd,
   cCTrCH-InformationList-RL-FailureInd
   iE-Extensions
                                   ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } }
                                                                                                 OPTIONAL,
   . . .
CCTrCHItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-InformationList-RL-FailureInd ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
FailureInd}}
CCTrCH-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
   { ID id-CCTrCH-InformationItem-RL-FailureInd
                                             CRITICALITY ignore
                                                                TYPE CCTrCH-InformationItem-RL-FailureInd
   PRESENCE mandatory }
CCTrCH-InformationItem-RL-FailureInd ::= SEQUENCE {
   cCTrCH-ID
                                       CCTrCH-ID,
   cause
                                       iE-Extensions
                                                                                                              OPTIONAL,
CCTrCH-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  -- RADIO LINK PREEMPTION REQUIRED INDICATION
  RadioLinkPreemptionRequiredIndication ::= SEQUENCE {
                            ProtocolIE-Container
                                                   {{RadioLinkPreemptionRequiredIndication-IEs}},
   protocolIEs
                             ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}}
   protocolExtensions
                                                                                                             OPTIONAL,
RadioLinkPreemptionRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CRNC-CommunicationContextID
                                             CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                              PRESENCE
mandatory } |
   PRESENCE
optional },
```

```
RadioLinkPreemptionRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { RL-InformationItemIE-RL-
PreemptRequiredInd}}
RL-InformationItemIE-RL-PreemptRequiredInd NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory },
RL-InformationItem-RL-PreemptReguiredInd::= SEQUENCE {
   rL-ID
                            RL-ID,
                            ProtocolExtensionContainer { {RL-InformationItem-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-InformationItem-RL-PreemptRequiredInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RESTORE INDICATION
__ **********************
RadioLinkRestoreIndication ::= SEQUENCE {
                                                  {{RadioLinkRestoreIndication-IEs}},
   protocolIEs
                ProtocolIE-Container
   protocolExtensions ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}}
                                                                                                           OPTIONAL,
RadioLinkRestoreIndication-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                              CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                           PRESENCE
                                                                                                                        mandatory
     ID
          id-Reporting-Object-RL-RestoreInd
                                              CRITICALITY ignore TYPE Reporting-Object-RL-RestoreInd
                                                                                                           PRESENCE
                                                                                                                        mandatory
RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
Reporting-Object-RL-RestoreInd ::= CHOICE {
   rL
                        RL-RL-RestoreInd, --TDD only
                        RL-Set-RL-RestoreInd, --FDD only
   rL-Set
   . . . ,
```

```
CCTrCH-RL-RestoreInd --TDD only
   cCTrCH
RL-RL-RestoreInd ::= SEQUENCE {
   rL-InformationList-RL-RestoreInd
                                      RL-InformationList-RL-RestoreInd,
                                      iE-Extensions
                                                                                                          OPTIONAL,
RLItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationItemIE-RL-RestoreInd}}
RL-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
                                             CRITICALITY ignore
   { ID id-RL-InformationItem-RL-RestoreInd
                                                                  TYPE RL-InformationItem-RL-RestoreInd
                                                                                                                       PRESENCE
   mandatory}
RL-InformationItem-RL-RestoreInd ::= SEQUENCE {
                                      ProtocolExtensionContainer { { RL-InformationItem-RL-RestoreInd-ExtIEs } }
   iE-Extensions
                                                                                                                OPTIONAL,
RL-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-RL-RestoreInd ::= SEQUENCE {
   rL-Set-InformationList-RL-RestoreInd
                                      RL-Set-InformationList-RL-RestoreInd,
   iE-Extensions
                                      OPTIONAL,
RL-SetItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-
RestoreInd }}
RL-Set-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
   TYPE RL-Set-InformationItem-RL-RestoreInd PRESENCE mandatory
RL-Set-InformationItem-RL-RestoreInd ::= SEQUENCE {
   rL-Set-ID
                        RL-Set-ID,
                        ProtocolExtensionContainer { { RL-Set-InformationItem-RL-RestoreInd-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Set-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
CCTrCH-RL-RestoreInd ::= SEQUENCE {
                                    RL-ID.
   cCTrCH-InformationList-RL-RestoreInd
                                    CCTrCH-InformationList-RL-RestoreInd,
                                    ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } }
   iE-Extensions
                                                                                                   OPTIONAL,
CCTrCHItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
RestoreInd}}
CCTrCH-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
   PRESENCE
                                                                                                               mandatory 
CCTrCH-InformationItem-RL-RestoreInd ::= SEQUENCE {
   cCTrCH-ID
                                       CCTrCH-ID.
                                       iE-Extensions
                                                                                                               OPTIONAL,
CCTrCH-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
     ******************
-- COMPRESSED MODE COMMAND FDD
  ***********************
CompressedModeCommand ::= SEQUENCE {
                       ProtocolIE-Container
                                              {{CompressedModeCommand-IEs}},
   protocolIEs
   protocolExtensions
                      ProtocolExtensionContainer {{CompressedModeCommand-Extensions}}
                                                                                            OPTIONAL.
CompressedModeCommand-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-NodeB-CommunicationContextID
                                           CRITICALITY ignore
                                                              TYPE NodeB-CommunicationContextID
                                                                                                         PRESENCE mandatory
   { ID id-Active-Pattern-Sequence-Information
                                           CRITICALITY ignore
                                                              TYPE Active-Pattern-Sequence-Information
                                                                                                         PRESENCE mandatory
```

PRESENCE

PRESENCE

PRESENCE

PRESENCE

OPTIONAL,

Cause

CRNC-CommunicationContextID

NodeB-CommunicationContextID

CriticalityDiagnostics

```
CompressedModeCommand-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- ERROR INDICATION
__ *********************
ErrorIndication ::= SEQUENCE {
              ProtocolIE-Container
                                            {{ErrorIndication-IEs}},
   protocolIEs
   protocolExtensions ProtocolExtensionContainer {{ErrorIndication-Extensions}}
ErrorIndication-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CRNC-CommunicationContextID
                                      CRITICALITY
                                                   ignore
                                                               TYPE
   optional } |
   { ID id-NodeB-CommunicationContextID
                                      CRITICALITY
                                                   ignore
                                                               TYPE
   optional } |
   { ID id-Cause
                                      CRITICALITY
                                                  ignore
                                                               TYPE
   optional } |
        id-CriticalityDiagnostics
   { ID
                                      CRITICALITY
                                                  ignore
                                                               TYPE
   optional },
   . . .
ErrorIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ******************
-- PRIVATE MESSAGE
__ **********************
PrivateMessage ::= SEQUENCE {
   privateIEs
             PrivateIE-Container {{PrivateMessage-IEs}},
PrivateMessage-IEs NBAP-PRIVATE-IES ::= {
__ **********************
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST FDD
```

```
PhysicalSharedChannelReconfigurationRequestFDD ::= SEQUENCE {
                       ProtocolIE-Container
                                                  {{PhysicalSharedChannelReconfigurationRequestFDD-IEs}},
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestFDD-Extensions}} OPTIONAL,
PhysicalSharedChannelReconfigurationRequestFDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID
                                                         CRITICALITY reject TYPE C-ID
    PRESENCE mandatory } |
    { ID id-ConfigurationGenerationID
                                                         CRITICALITY reject TYPE ConfigurationGenerationID
    PRESENCE mandatory } |
    { ID id-SFN
                                                         CRITICALITY reject TYPE SFN
    PRESENCE optional }
    { ID id-HS-PDSCH-HS-SCCH-E-AGCH-E-RGCH-E-HICH-MaxPower-PSCH-ReconfRqst
                                                                                                               TYPE MaximumTransmissionPower
                                                                            CRITICALITY reject
                   PRESENCE optional }
    { ID id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRgst CRITICALITY reject TYPE DL-ScramblingCode
    PRESENCE optional }
    PRESENCE optional }
    { ID id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst
                                                         CRITICALITY reject TYPE HS-SCCH-FDD-Code-Information
    PRESENCE optional }.
PhysicalSharedChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code
                                                             CRITICALITY reject EXTENSION DL-ScramblingCode
                   PRESENCE optional }
    { ID id-E-AGCH-FDD-Code-Information
                                                                 CRITICALITY reject EXTENSION E-AGCH-FDD-Code-Information
                   PRESENCE optional } |
    { ID id-E-RGCH-E-HICH-FDD-Code-Information
                                                                 CRITICALITY reject EXTENSION E-RGCH-E-HICH-FDD-Code-Information
           PRESENCE optional }
    {ID id-HSDPA-And-EDCH-CellPortion-Information-PSCH-ReconfRgst
                                                                 CRITICALITY reject EXTENSION HSDPA-And-EDCH-CellPortion-InformationList-PSCH-
ReconfRast
               PRESENCE optional } |
    {ID id-Maximum-Target-ReceivedTotalWideBandPower
                                                                 CRITICALITY reject EXTENSION Maximum-Target-ReceivedTotalWideBandPower
       PRESENCE optional } |
    {ID id-Reference-ReceivedTotalWideBandPower
                                                                 CRITICALITY ignore EXTENSION Reference-ReceivedTotalWideBandPower
                PRESENCE optional } |
    {ID id-Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio
                                                                 CRITICALITY reject EXTENSION Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio
       PRESENCE optional } |
    { ID id-HSDSCH-Common-System-InformationFDD
                                                                 CRITICALITY reject EXTENSION HSDSCH-Common-System-InformationFDD
       PRESENCE optional } |
     ID id-Common-MACFlows-to-DeleteFDD
                                                     CRITICALITY reject EXTENSION Common-MACFlows-to-DeleteFDD
                   PRESENCE optional } |
    { ID id-HSDSCH-Paging-System-InformationFDD
                                                         CRITICALITY reject EXTENSION HSDSCH-Paging-System-InformationFDD
           PRESENCE optional } |
    { ID id-Paging-MACFlows-to-DeleteFDD
                                                      CRITICALITY reject EXTENSION Paging-MACFlows-to-DeleteFDD
                   PRESENCE optional }
    { ID id-Common-EDCH-System-InformationFDD
                                                         CRITICALITY reject EXTENSION Common-EDCH-System-InformationFDD
                          PRESENCE optional }
    { ID id-Common-UL-MACFlows-to-DeleteFDD
                                                      CRITICALITY reject EXTENSION Common-MACFlows-to-DeleteFDD
                      PRESENCE optional } |
```

```
{ ID id-Common-EDCH-MACdFlows-to-DeleteFDD
                                                              CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-Delete
                       PRESENCE optional }
     ID id-Enhanced-UE-DRX-InformationFDD
                                                      CRITICALITY reject. EXTENSION Enhanced-UE-DRX-InformationFDD
                       PRESENCE optional },
HSDPA-And-EDCH-CellPortion-InformationList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF HSDPA-And-EDCH-CellPortion-
InformationItem-PSCH-ReconfRqst
HSDPA-And-EDCH-CellPortion-InformationItem-PSCH-ReconfRqst::= SEQUENCE {
    cellPortionID
                                                                     CellPortionID,
   hS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRgst
                                                                     DL-ScramblingCode
                                                                                                                    OPTIONAL.
   hS-PDSCH-FDD-Code-Information-PSCH-ReconfRgst
                                                                     HS-PDSCH-FDD-Code-Information
                                                                                                                    OPTIONAL.
   hS-SCCH-FDD-Code-Information-PSCH-ReconfRgst
                                                                     HS-SCCH-FDD-Code-Information
                                                                                                                    OPTIONAL,
   hs-pdsch-Hs-scch-E-Agch-E-Rgch-E-Hich-MaxPower-Psch-Reconfrqst
                                                                     MaximumTransmissionPower
                                                                                                                    OPTIONAL,
    e-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code
                                                                     DL-ScramblingCode
                                                                                                                    OPTIONAL,
    e-AGCH-FDD-Code-Information
                                                                     E-AGCH-FDD-Code-Information
                                                                                                                    OPTIONAL,
    e-RGCH-E-HICH-FDD-Code-Information
                                                                     E-RGCH-E-HICH-FDD-Code-Information
                                                                                                                    OPTIONAL,
                                                                     ProtocolExtensionContainer { { HSDPA-And-EDCH-CellPortion-InformationItem-
   iE-Extensions
PSCH-ReconfRqst-ExtIEs } }
                          OPTIONAL,
HSDPA-And-EDCH-CellPortion-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
         *****************
PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                                   {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}}
                                                                                                                OPTIONAL,
PhysicalSharedChannelReconfigurationRequestTDD-IES NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                                  CRITICALITY reject TYPE C-ID
                                                                                                                    PRESENCE mandatory } |
     ID id-SFN
                                                  CRITICALITY reject TYPE SFN
                                                                                                                    PRESENCE optional
     ID id-PDSCHSets-AddList-PSCH-ReconfRqst
                                                                                                                    PRESENCE optional
                                                  CRITICALITY reject TYPE PDSCHSets-AddList-PSCH-ReconfRqst
     ID id-PDSCHSets-ModifyList-PSCH-ReconfRast
                                                  CRITICALITY reject TYPE PDSCHSets-ModifyList-PSCH-ReconfRqst
                                                                                                                    PRESENCE optional
                                                                                                                    PRESENCE optional
     ID id-PDSCHSets-DeleteList-PSCH-ReconfRqst
                                                  CRITICALITY reject TYPE PDSCHSets-DeleteList-PSCH-ReconfRqst
     ID id-PUSCHSets-AddList-PSCH-ReconfRast
                                                  CRITICALITY reject TYPE PUSCHSets-AddList-PSCH-ReconfRast
                                                                                                                    PRESENCE optional
     ID id-PUSCHSets-ModifyList-PSCH-ReconfRqst
                                                  CRITICALITY reject TYPE PUSCHSets-ModifyList-PSCH-ReconfRqst
                                                                                                                    PRESENCE optional } |
                                                                                                                    PRESENCE optional },
     ID id-PUSCHSets-DeleteList-PSCH-ReconfRqst
                                                  CRITICALITY reject TYPE PUSCHSets-DeleteList-PSCH-ReconfRqst
    . . .
PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst
                                                              CRITICALITY reject EXTENSION HS-PDSCH-TDD-Information-PSCH-ReconfRqst
    PRESENCE optional } |
    { ID id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRgst
                                                              CRITICALITY reject EXTENSION Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRast
       PRESENCE optional } |
    { ID id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRgst
                                                              CRITICALITY reject EXTENSION Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
       PRESENCE optional } |
    { ID id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRast
                                                              CRITICALITY reject EXTENSION Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRast
       PRESENCE optional } |
    { ID id-ConfigurationGenerationID
                                                          CRITICALITY reject EXTENSION ConfigurationGenerationID
    PRESENCE optional }
    { ID id-E-PUCH-Information-PSCH-ReconfRqst
                                                                          CRITICALITY reject EXTENSION E-PUCH-Information-PSCH-ReconfRqst
                                                  PRESENCE optional } |
                                                                          CRITICALITY reject EXTENSION Add-To-E-AGCH-Resource-Pool-PSCH-
    { ID id-Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst
ReconfRast
                           PRESENCE optional }
    { ID id-Modify-E-AGCH-Resource-Pool-PSCH-ReconfRgst
                                                                          CRITICALITY reject EXTENSION Modify-E-AGCH-Resource-Pool-PSCH-
ReconfRast
                                          PRESENCE optional } |
    { ID id-Delete-From-E-AGCH-Resource-Pool-PSCH-ReconfRqst
                                                                          CRITICALITY reject EXTENSION Delete-From-E-AGCH-Resource-Pool-PSCH-
                                          PRESENCE optional }
ReconfRast
    { ID id-E-HICH-Information-PSCH-ReconfRqst
                                                                          CRITICALITY reject EXTENSION E-HICH-Information-PSCH-ReconfRqst
           PRESENCE optional } |
    { ID id-Maximum-Generated-ReceivedTotalWideBandPowerInOtherCells
                                                                          CRITICALITY reject EXTENSION Maximum-Generated-
ReceivedTotalWideBandPowerInOtherCells
                                          PRESENCE optional } | -- Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    { ID id-E-PUCH-Information-768-PSCH-ReconfRqst
                                                                          CRITICALITY reject EXTENSION E-PUCH-Information-768-PSCH-ReconfRqst
                                                  PRESENCE optional }
                                                                          CRITICALITY reject EXTENSION Add-To-E-AGCH-Resource-Pool-768-PSCH-
    { ID id-Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst
ReconfRast
                   PRESENCE optional }
    { ID id-Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRgst
                                                                                                      EXTENSION Modify-E-AGCH-Resource-Pool-768-
                                                                              CRITICALITY reject
PSCH-ReconfRast
                                              PRESENCE optional } |
    { ID id-E-HICH-Information-768-PSCH-ReconfRqst
                                                                          CRITICALITY reject EXTENSION E-HICH-Information-768-PSCH-ReconfRqst
               PRESENCE optional } |
    { ID id-E-PUCH-Information-LCR-PSCH-ReconfRqst
                                                                          CRITICALITY reject EXTENSION E-PUCH-Information-LCR-PSCH-ReconfRqst
                                                  PRESENCE optional } |
    { ID id-Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst
                                                                          CRITICALITY reject EXTENSION Add-To-E-AGCH-Resource-Pool-LCR-PSCH-
                   PRESENCE optional }
ReconfRast
    { ID id-Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRast
                                                                          CRITICALITY reject EXTENSION Modify-E-AGCH-Resource-Pool-LCR-PSCH-
ReconfRast
                                          PRESENCE optional } |
    { ID id-Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst
                                                             CRITICALITY reject EXTENSION Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRast
           PRESENCE optional } |
    { ID id-Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRgst
                                                              CRITICALITY reject EXTENSION Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst
           PRESENCE optional }
    { ID id-Delete-From-E-HICH-Resource-Pool-PSCH-ReconfRqst
                                                                  CRITICALITY reject EXTENSION Delete-From-E-HICH-Resource-Pool-PSCH-ReconfRqst
                                   PRESENCE optional }
    { ID id-SYNC-UL-Partition-LCR
                                                                          CRITICALITY reject EXTENSION SYNC-UL-Partition-LCR
                                              PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    { ID id-Maximum-Target-ReceivedTotalWideBandPower-LCR
                                                                          CRITICALITY reject EXTENSION Maximum-Target-
ReceivedTotalWideBandPower-LCR
                                                  PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only.
    { ID id-Delete-From-HS-SCCH-Resource-PoolExt-PSCH-ReconfRqst
                                                                  CRITICALITY reject
                                                                                         EXTENSION Delete-From-HS-SCCH-Resource-PoolExt-PSCH-
ReconfRast
               PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only, used when there are more than maxNrOfHSSCCHs HS-SCCHs in the message.
    PRESENCE
optional }|
```

```
{ ID id-Common-MACFlows-to-DeleteLCR
                                                        CRITICALITY reject EXTENSION Common-MACFlows-to-DeleteLCR
    PRESENCE optional }
    { ID id-HSDSCH-Paging-System-InformationLCR
                                                        CRITICALITY reject EXTENSION HSDSCH-Paging-System-InformationLCR
                                                                                                                                       PRESENCE
optional }|
    { ID id-Paging-MACFlows-to-DeleteLCR
                                                        CRITICALITY reject EXTENSION Paging-MACFlows-to-DeleteLCR
    PRESENCE optional }
     ID id-Common-EDCH-System-InformationLCR
                                                                                                                               PRESENCE optional } |
                                                        CRITICALITY reject EXTENSION Common-EDCH-System-InformationLCR
     ID id-Common-UL-MACFlows-to-DeleteLCR
                                                        CRITICALITY reject EXTENSION Common-MACFlows-to-DeleteLCR
    PRESENCE optional }
    { ID id-Common-EDCH-MACdFlows-to-DeleteLCR
                                                        CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-DeleteLCR
    PRESENCE optional }
    { ID id-Enhanced-UE-DRX-InformationLCR
                                                        CRITICALITY reject EXTENSION Enhanced-UE-DRX-InformationLCR
                                                                                                                                       PRESENCE
optional }|
    ID id-Add-To-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst
                                                                                        CRITICALITY reject
                                                                                                                EXTENSION Add-To-Non-HS-SCCH-
Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst
                                                                PRESENCE optional }
     ID id-Modify-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst
                                                                                        CRITICALITY reject
                                                                                                                        EXTENSION Modify-Non-HS-
SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst
                                                               PRESENCE optional } |
    { ID id-Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst
                                                                                                CRITICALITY reject
                                                                                                                               EXTENSION Delete-
From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst
                                                                            PRESENCE optional } |
    { ID id-PowerControlGAP-For-CellFACHLCR
                                                       CRITICALITY ignore EXTENSION ControlGAP
       PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only.
    { ID id-Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst-Ext CRITICALITY reject
                                                                                                                        EXTENSION Delete-From-Non-
HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst-Ext
                                                                        PRESENCE optional } |
    { ID id-Out-of-Sychronization-Window
                                                       CRITICALITY reject EXTENSION Out-of-Sychronization-Window
    PRESENCE optional }
    { ID id-Treset-Usage-Indicator
                                                       CRITICALITY ignore EXTENSION NULL
                                                                                                PRESENCE optional },
    . . .
PDSCHSets-AddList-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRgst
PDSCHSets-AddItem-PSCH-ReconfRqst
                                    ::= SEOUENCE {
    pDSCHSet-ID
                                                PDSCHSet-ID,
    pDSCH-InformationList
                                                PDSCH-Information-AddList-PSCH-Reconfrast OPTIONAL.
                                                                                                                   -- Mandatory for 3.84Mcps TDD.
Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD
    iE-Extensions
                                                ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } }
                                                                                                                                       OPTIONAL,
PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-AddInformation-LCR-PSCH-ReconfRgst
                                                       CRITICALITY reject
                                                                                EXTENSION PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
                   optional} | -- Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    {ID id-PDSCH-AddInformation-768-PSCH-ReconfRqst
                                                       CRITICALITY reject
                                                                                EXTENSION PDSCH-AddInformation-768-AddItem-PSCH-ReconfRqst
       PRESENCE
                   optional \, -- Mandatory for 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }}
-- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD
PDSCH-Information-AddListIEs-PSCH-ReconfRgst
                                               NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject
                                                                                TYPE
                                                                                        PDSCH-Information-AddItem-PSCH-ReconfRqst
    PRESENCE
               mandatory}
```

```
PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength,
                                          TDD-PhysicalChannelOffset,
    tdd-PhysicalChannelOffset
    dL-Timeslot-InformationAddList-PSCH-ReconfRqst
                                                             DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
   iE-Extensions
                                          ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                   OPTIONAL.
PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationAddList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRgst
DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
   timeSlot
                                          TimeSlot,
   midambleShiftAndBurstType
                                          MidambleShiftAndBurstType,
    tFCI-Presence
                                          TFCI-Presence,
    dL-Code-InformationAddList-PSCH-ReconfRqst
                                                          DL-Code-InformationAddList-PSCH-ReconfRqst,
                                          ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
DL-Timeslot-InformationAddItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst
DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
   pDSCH-ID
                                          PDSCH-ID,
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   iE-Extensions
                                          OPTIONAL,
DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEOUENCE {
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
    tdd-PhysicalChannelOffset
                                          TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst
                                                                 DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
                                              ProtocolExtensionContainer { { PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
```

```
PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ID id-Tstd-indicator
                               CRITICALITY reject
                                                      EXTENSION TSTD-Indicator
                                                                                     PRESENCE
                                                                                                                 optional
    -- Applicable to 1.28Mcps TDD only
DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst
DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
   tFCI-Presence
                                          TFCI-Presence,
   dL-Code-InformationAddList-LCR-PSCH-ReconfRqst
                                                              DL-Code-InformationAddList-LCR-PSCH-ReconfRgst,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst
DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
                                          PDSCH-ID,
   pDSCH-ID
   tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRgst-ExtIEs} }
   OPTIONAL,
DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    PRESENCE
                                                                              EXTENSION TDD-DL-DPCH-TimeSlotFormat-LCR
optional }.
    . . .
PDSCH-AddInformation-768-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength,
    tdd-PhysicalChannelOffset
                                          TDD-PhysicalChannelOffset,
   dL-Timeslot-InformationAddList-768-PSCH-ReconfRqst
                                                                  DL-Timeslot-InformationAddList-768-PSCH-ReconfRqst,
                                              ProtocolExtensionContainer { {PDSCH-AddInformation-768-AddItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
PDSCH-AddInformation-768-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationAddList-768-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst
```

```
DL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst ::= SEQUENCE {
   timeSlot
                                         TimeSlot.
   midambleShiftAndBurstType768
                                         MidambleShiftAndBurstType768,
   tFCI-Presence
                                         TFCI-Presence,
    dL-Code-InformationAddList-768-PSCH-ReconfRqst
                                                            DL-Code-InformationAddList-768-PSCH-ReconfRqst,
                                         ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-InformationAddList-768-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationAddItem-768-PSCH-ReconfRgst
DL-Code-InformationAddItem-768-PSCH-ReconfRqst ::= SEQUENCE {
   pDSCH-ID768
                                         PDSCH-ID768,
    tdd-ChannelisationCode768
                                         TDD-ChannelisationCode768,
                                         ProtocolExtensionContainer { { DL-Code-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-Code-InformationAddItem-768-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst
PDSCHSets-ModifyItem-PSCH-ReconfRgst
                                      ::= SEQUENCE {
   pDSCHSet-ID
                                             PDSCHSet-ID,
   pDSCH-InformationList
                                             PDSCH-Information-ModifyList-PSCH-ReconfRqst,
                                             ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-ModifyInformation-768-PSCH-ReconfRqst CRITICALITY reject
                                                                           EXTENSION PDSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRgst
                     optional, -- For 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
    . . .
PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}
PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    optional}|
    {ID id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst
                                                        CRITICALITY reject TYPE PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst
       PRESENCE optional }
PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE
    repetitionPeriod
                                                     RepetitionPeriod
                                                                                                                  OPTIONAL,
```

```
repetitionLength
                                                      RepetitionLength
                                                                                                                     OPTIONAL,
    tdd-PhysicalChannelOffset
                                                      TDD-PhysicalChannelOffset
                                                                                                                     OPTIONAL.
    dL-Timeslot-InformationModifyList-PSCH-ReconfRast
                                                      DL-Timeslot-InformationModifyList-PSCH-ReconfRgst
                                                                                                                     OPTIONAL.
   iE-Extensions
                                              OPTIONAL.
    . . .
PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst
DL-Timeslot-InformationModifyItem-PSCH-ReconfRgst ::= SEQUENCE
    timeSlot
                                                  TimeSlot,
   midambleShiftAndBurstType
                                                  MidambleShiftAndBurstType
                                                                                                                     OPTIONAL,
   tFCI-Presence
                                                  TFCI-Presence
                                                                                                                     OPTIONAL,
    dL-Code-InformationModifyList-PSCH-ReconfRqst
                                                              DL-Code-InformationModifyList-PSCH-ReconfRqst
                                                                                                                     OPTIONAL,
                                          ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst
DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   pDSCH-ID
                                          PDSCH-ID,
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
                                          ProtocolExtensionContainer { { DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                                              RepetitionPeriod
                                                                                                                            OPTIONAL,
    repetitionLength
                                                              RepetitionLength
                                                                                                                            OPTIONAL,
   tdd-PhysicalChannelOffset
                                                              TDD-PhysicalChannelOffset
                                                                                                                            OPTIONAL,
   dL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRgst
                                                              DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst
                                                                                                                            OPTIONAL,
                                              ProtocolExtensionContainer { {PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
       OPTIONAL,
    . . .
PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-LCR-InformationModifyItem-PSCH-
ReconfRast
DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEOUENCE {
    timeSlotLCR
                                                          TimeSlotLCR,
   midambleShiftLCR
                                                          MidambleShiftLCR
                                                                                                                     OPTIONAL,
   tFCI-Presence
                                                          TFCI-Presence
                                                                                                                     OPTIONAL,
                                                          DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst
    dL-Code-LCR-InformationModifyList-PSCH-ReconfRqst
                                                                                                                     OPTIONAL,
                                          ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst
DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   pDSCH-ID
                                           PDSCH-ID,
    tdd-ChannelisationCodeLCR
                                           TDD-ChannelisationCodeLCR,
   iE-Extensions
                                           ProtocolExtensionContainer { { DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
    . . .
DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    EXTENSION TDD-DL-DPCH-TimeSlotFormat-LCR
                                                                                                                                    PRESENCE
optional},
PDSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                                              RepetitionPeriod
                                                                                                                             OPTIONAL,
    repetitionLength
                                                              RepetitionLength
                                                                                                                             OPTIONAL,
    tdd-PhysicalChannelOffset
                                                              TDD-PhysicalChannelOffset
                                                                                                                             OPTIONAL,
    dL-Timeslot-768-InformationModifyList-PSCH-ReconfRqst
                                                              DL-Timeslot-768-InformationModifyList-PSCH-ReconfRqst
                                                                                                                             OPTIONAL,
                                               ProtocolExtensionContainer { {PDSCH-ModifyInformation-768-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
       OPTIONAL,
PDSCH-ModifyInformation-768-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DL-Timeslot-768-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-768-InformationModifyItem-PSCH-
ReconfRqst
DL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
```

```
timeSlot
                                                          TimeSlot,
   midambleShiftAndBurstType768
                                                         MidambleShiftAndBurstType768
           OPTIONAL.
   tFCI-Presence
                                                         TFCI-Presence
           OPTIONAL.
   dL-Code-768-InformationModifyList-PSCH-ReconfRqst
                                                         DL-Code-768-InformationModifyList-PSCH-ReconfRgst
       OPTIONAL,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
    . . .
DL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-768-InformationModifyList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1...maxNrOfPDSCHs)) OF DL-Code-768-InformationModifyItem-PSCH-ReconfRgst
DL-Code-768-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   pDSCH-ID768
                                          PDSCH-ID768,
   tdd-ChannelisationCode768
                                          TDD-ChannelisationCode768.
                                          ProtocolExtensionContainer { { DL-Code-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-Code-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCHSets-DeleteList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRgst
PDSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
   pDSCHSet-ID
   iE-Extensions
                                              OPTIONAL.
PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst
PUSCHSets-AddItem-PSCH-ReconfRast ::= SEOUENCE {
   pUSCHSet-ID
                                              PUSCHSet-ID.
   pUSCH-InformationList
                                              PUSCH-Information-AddList-PSCH-ReconfRgst OPTIONAL.
   -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD
   iE-Extensions
                                              ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } 
                                                                                                                                  OPTIONAL.
    . . .
PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst
                                                     CRITICALITY reject
                                                                             EXTENSION PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
       PRESENCE
                   optional \ -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    { ID id-PUSCH-AddInformation-768-PSCH-ReconfRqst
                                                    CRITICALITY reject
                                                                             EXTENSION PUSCH-AddInformation-768-AddItem-PSCH-ReconfRqst
       PRESENCE optional }, -- Mandatory for 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
    . . .
PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }}
PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    { ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-AddItem-PSCH-ReconfRqst
                                                                                                                                  PRESENCE
mandatory }
PUSCH-Information-AddItem-PSCH-ReconfRgst ::= SEQUENCE {
    repetitionPeriod
                                                  RepetitionPeriod,
    repetitionLength
                                                  RepetitionLength,
    tdd-PhysicalChannelOffset
                                                  TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-PSCH-ReconfRgst UL-Timeslot-InformationAddList-PSCH-ReconfRgst,
                                                  ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRgst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationAddList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRgst
UL-Timeslot-InformationAddItem-PSCH-ReconfRgst ::= SEQUENCE {
   timeSlot
                                              TimeSlot,
   midambleShiftAndBurstType
                                              MidambleShiftAndBurstType,
                                              TFCI-Presence,
   tFCI-Presence
   uL-Code-InformationAddList-PSCH-ReconfRgst UL-Code-InformationAddList-PSCH-ReconfRgst.
   iE-Extensions
                                              OPTIONAL,
UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst
UL-Code-InformationAddItem-PSCH-ReconfRast ::= SEOUENCE
   pUSCH-ID
                                          PUSCH-ID.
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode
                                          ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                  OPTIONAL,
UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                                      RepetitionPeriod,
   repetitionLength
                                                      RepetitionLength,
    tdd-PhysicalChannelOffset
                                                      TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
                                              ProtocolExtensionContainer { {PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
    . . .
PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfULTSLCRs)) OF UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRgst
UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR
                                                  TimeSlotLCR,
   midambleShiftLCR
                                                  MidambleShiftLCR,
   tFCI-Presence
                                                  TFCI-Presence,
   uL-Code-InformationAddList-LCR-PSCH-ReconfRqst UL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
                                          ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst
UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   pUSCH-ID
    tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR,
                                          ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    EXTENSION TDD-UL-DPCH-TimeSlotFormat-LCR
                                                                                                                                    PRESENCE
optional},
PUSCH-AddInformation-768-AddItem-PSCH-Reconfigst ::= SEQUENCE {
    repetitionPeriod
                                                      RepetitionPeriod,
    repetitionLength
                                                      RepetitionLength,
    tdd-PhysicalChannelOffset
                                                      TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-768-PSCH-ReconfRqst UL-Timeslot-InformationAddList-768-PSCH-ReconfRqst,
```

```
ProtocolExtensionContainer { {PUSCH-AddInformation-768-AddItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL.
PUSCH-AddInformation-768-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationAddList-768-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst
UL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot
   midambleShiftAndBurstType768
                                                    MidambleShiftAndBurstType768,
                                                    TFCI-Presence,
    tFCI-Presence
    uL-Code-InformationAddList-768-PSCH-ReconfRgst UL-Code-InformationAddList-768-PSCH-ReconfRgst,
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
UL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationAddList-768-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-768-PSCH-ReconfRqst
UL-Code-InformationAddItem-768-PSCH-ReconfRgst ::= SEQUENCE {
    pUSCH-ID
                                            PUSCH-ID,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Code-InformationAddItem-768-PSCH-ReconfRgst-ExtIEs} }
    OPTIONAL,
    . . .
UL-Code-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCHSets-ModifyList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRgst
PUSCHSets-ModifyItem-PSCH-ReconfRqst
                                         ::= SEQUENCE {
    pUSCHSet-ID
                                                PUSCHSet-ID,
    pUSCH-InformationList
                                                PUSCH-Information-ModifyList-PSCH-ReconfRqst,
                                                ProtocolExtensionContainer { {PUSCHSets-ModifyItem-PSCH-ReconfRast-ExtIEs} }
   iE-Extensions
                                                                                                                                        OPTIONAL,
PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-ModifyInformation-768-PSCH-ReconfRqst CRITICALITY reject
                                                                                EXTENSION PUSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRgst
                      optional \, -- For 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
    . . .
```

```
PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}
PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    TYPE PUSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE
               optional}|
    {ID id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRgst
                                                          CRITICALITY reject
                                                                                  TYPE PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst
           PRESENCE
                       optional}
PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE
    repetitionPeriod
                                                      RepetitionPeriod
                                                                                                                 OPTIONAL,
    repetitionLength
                                                      RepetitionLength
                                                                                                                 OPTIONAL,
    tdd-PhysicalChannelOffset
                                                      TDD-PhysicalChannelOffset
                                                                                         OPTIONAL.
   uL-Timeslot-InformationModifyList-PSCH-ReconfRqst UL-Timeslot-InformationModifyList-PSCH-ReconfRqst
                                                                                                                     OPTIONAL.
                                              ProtocolExtensionContainer { {PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst
UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE
    timeSlot
                                                  TimeSlot,
   midambleShiftAndBurstType
                                                  MidambleShiftAndBurstType
                                                                                                                 OPTIONAL,
   tFCI-Presence
                                                  TFCI-Presence
                                                                                                                 OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRgst UL-Code-InformationModifyList-PSCH-ReconfRgst
                                                                                                                     OPTIONAL,
                                          ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationModifyList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRgst
UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   pUSCH-ID
                                          PUSCH-ID,
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
                                          ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRgst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
```

```
repetitionPeriod
                                                           RepetitionPeriod
                                                                                                                 OPTIONAL,
    repetitionLength
                                                           RepetitionLength
                                                                                                                 OPTIONAL.
    tdd-PhysicalChannelOffset
                                                           TDD-PhysicalChannelOffset
                                                                                                                 OPTIONAL.
   uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRgst UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRgst OPTIONAL,
   iE-Extensions
                                               ProtocolExtensionContainer { {PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
    . . .
PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModifyItem-PSCH-
ReconfRast
UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
                                                       TimeSlotLCR,
    timeSlotLCR
                                                      MidambleShiftLCR
   midambleShiftLCR
                                                                                                                  OPTIONAL,
   tFCI-Presence
                                                       TFCI-Presence
                                                                                                                 OPTIONAL,
   uL-Code-LCR-InformationModifyList-PSCH-ReconfRqst UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst
                                                                                                                 OPTIONAL,
                                           ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-LCR-InformationModifyList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1...maxNrOfPUSCHs)) OF UL-Code-LCR-InformationModifyList-PSCH-ReconfRgst
UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE
   pUSCH-ID
                                           PUSCH-ID,
   tdd-ChannelisationCodeLCR
                                           TDD-ChannelisationCodeLCR,
   iE-Extensions
                                           ProtocolExtensionContainer { { UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    EXTENSION TDD-UL-DPCH-TimeSlotFormat-LCR
                                                                                                                                    PRESENCE
optional},
PUSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRgst ::= SEQUENCE {
    repetitionPeriod
                                                           RepetitionPeriod
                                                                                                                 OPTIONAL,
    repetitionLength
                                                          RepetitionLength
                                                                                                                 OPTIONAL.
    tdd-PhysicalChannelOffset
                                                          TDD-PhysicalChannelOffset
                                                                                                                 OPTIONAL,
    uL-Timeslot-InformationModifyList-768-PSCH-ReconfRqst UL-Timeslot-768-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
   iE-Extensions
                                               ProtocolExtensionContainer { {PUSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
    . . .
```

```
PUSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-768-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-768-InformationModifyItem-PSCH-
ReconfRast
UL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
                                                        TimeSlot,
   midambleShiftAndBurstType768
                                                        MidambleShiftAndBurstType768
   OPTIONAL,
    tFCI-Presence
                                                        TFCI-Presence
                        OPTIONAL,
    uL-Code-768-InformationModifyList-PSCH-ReconfRgst UL-Code-768-InformationModifyList-PSCH-ReconfRgst
                                                                                                                     OPTIONAL,
                                            ProtocolExtensionContainer { { UL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
UL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-768-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-768-InformationModifyItem-PSCH-ReconfRqst
UL-Code-768-InformationModifyItem-PSCH-ReconfRgst ::= SEQUENCE
    pUSCH-ID
                                            PUSCH-ID,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768,
                                            ProtocolExtensionContainer { { UL-Code-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
UL-Code-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCHSets-DeleteList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRgst
PUSCHSets-DeleteItem-PSCH-ReconfRqst
                                         ::= SEQUENCE {
    pUSCHSet-ID
                                                ProtocolExtensionContainer { {PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                        OPTIONAL,
    . . .
PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-PDSCH-TDD-Information-PSCH-ReconfRqst ::= SEQUENCE {
    dL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst
                                                                        DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst
    OPTIONAL,
```

```
dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                                                        DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
    -- This HS-PDSCH Timeslot Information is for the first Frequency repetition, HS-PDSCH Timeslot information for Frequency repetitions 2 and on,
should be defined in MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst
    iE-Extensions
                                                ProtocolExtensionContainer { { HS-PDSCH-TDD-Information-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL.
    . . .
HS-PDSCH-TDD-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-dL-HS-PDSCH-Timeslot-Information-768-PSCH-ReconfRqst
                                                                                                CRITICALITY reject
                                                                                                                        EXTENSION DL-HS-PDSCH-
Timeslot-Information-768-PSCH-ReconfRqst
                                                    PRESENCE optional } -- For 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
    { ID id-UARFCNforNt
                                                                                                CRITICALITY ignore
                                                                                                                        EXTENSION UARFON
                                                                    PRESENCE optional } |
    -- This is the UARFCN for the first Frequency repetition. Mandatory for 1.28Mcps TDD when using multiple frequencies.
    { ID id-multipleFreg-dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                                                                                CRITICALITY reject
                                                                                                                        EXTENSION MultipleFreg-DL-
HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst
                                                       PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies, This Information is for the 2nd and beyond Frequency repetition
DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst
DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRgst::= SEOUENCE
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    dl-HS-PDSCH-Codelist-PSCH-ReconfRqst
                                            DL-HS-PDSCH-Codelist-PSCH-ReconfRgst,
    maxHSDSCH-HSSCCH-Power
                                            MaximumTransmissionPower
                                                                                    OPTIONAL.
                                            ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-HS-PDSCH-Codelist-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSPDSCHs)) OF TDD-ChannelisationCode
DL-HS-PDSCH-Timeslot-Information-768-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-HS-PDSCH-Timeslot-InformationItem-768-PSCH-
ReconfRast
DL-HS-PDSCH-Timeslot-InformationItem-768-PSCH-ReconfRqst::= SEQUENCE {
                                                TimeSlot,
    timeSlot
    midambleShiftAndBurstType768
                                                MidambleShiftAndBurstType768,
    dl-HS-PDSCH-Codelist-768-PSCH-ReconfRast
                                               DL-HS-PDSCH-Codelist-768-PSCH-ReconfRast.
    maxHSDSCH-HSSCCH-Power
                                                MaximumTransmissionPower
                                                                                            OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-768-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
DL-HS-PDSCH-Timeslot-InformationItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

897

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DL-HS-PDSCH-Codelist-768-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSPDSCHs768)) OF TDD-ChannelisationCode768
MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-Container{
MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItemIE-PSCH-ReconfRqst}}
   -- Includes the 2nd through the max number of frequency repetitions.
MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItemIE-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    ID id-MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst CRITICALITY reject
                                                                                                          TYPE MultipleFreq-DL-HS-PDSCH-
Timeslot-Information-LCRItem-PSCH-ReconfRqst PRESENCE optional }
MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItem-PSCH-ReconfRgst ::= SEQUENCE
   dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                                       DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst
                                                                                                          OPTIONAL.
   uARFCN
   iE-Extensions
                                                       PSCH-ReconfRqst-ExtIEs }
                             OPTIONAL,
MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst::= SEQUENCE {
   hS-SCCH-Information-PSCH-ReconfRgst
                                        HS-SCCH-Information-PSCH-ReconfRgst
                                                                                 OPTIONAL,
   hS-SCCH-Information-LCR-PSCH-ReconfRqst HS-SCCH-Information-LCR-PSCH-ReconfRqst
                                                                                 OPTIONAL,
                                        ProtocolExtensionContainer { { Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-hS-SCCH-Information-768-PSCH-ReconfRqst CRITICALITY reject
                                                                     EXTENSION HS-SCCH-Information-768-PSCH-ReconfRqst
   PRESENCE optional }
   -- 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
   PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only, used when there are more than maxNrOfHSSCCHs HS-SCCHs in the message.
HS-SCCH-Information-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-PSCH-ReconfRqst
HS-SCCH-InformationItem-PSCH-ReconfRgst ::= SEOUENCE
   hs-sccH-ID
                                        HS-SCCH-ID,
   timeSlot
                                        TimeSlot,
   midambleShiftAndBurstType
                                        MidambleShiftAndBurstType,
   tdd-ChannelisationCode
                                        TDD-ChannelisationCode,
   hS-SCCH-MaxPower
                                        DL-Power,
   hS-SICH-Information
                                        HS-SICH-Information-PSCH-ReconfRqst,
   iE-Extensions
                                        ProtocolExtensionContainer { { HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                            OPTIONAL,
```

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HS-SCCH-InformationItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Information-PSCH-ReconfRqst ::= SEQUENCE {
   hsSICH-ID
                                          HS-SICH-ID,
   timeSlot
                                          TimeSlot,
   midambleShiftAndBurstType
                                          MidambleShiftAndBurstType,
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
                                           ProtocolExtensionContainer { { HS-SICH-Information-PSCH-ReconfRgst-ExtIEs} }
   iE-Extensions
                                                                                                                                    OPTIONAL,
HS-SICH-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
HS-SCCH-Information-LCR-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst
HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   hs-sccH-ID
                                           HS-SCCH-ID,
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                           MidambleShiftLCR.
   first-TDD-ChannelisationCode
                                           TDD-ChannelisationCode,
    second-TDD-ChannelisationCode
                                           TDD-ChannelisationCode,
   hS-SCCH-MaxPower
                                           DL-Power,
   hS-SICH-Information-LCR
                                           HS-SICH-Information-LCR-PSCH-ReconfRqst,
                                           ProtocolExtensionContainer { { HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extended-HS-SCCH-ID
                                                    CRITICALITY ignore
                                                                          EXTENSION Extended-HS-SCCH-ID
                                                                                                                 PRESENCE optional } |
   -- used if the HS-SCCH identity has a value larger than 31
   { ID id-UARFCNforNt
                                                  CRITICALITY ignore
                                                                                               PRESENCE optional } |
                                                                          EXTENSION UARFCN
   -- Mandatory for 1.28Mcps TDD when using multiple frequencies
    EXTENSION HSSICH-ReferenceSignal-InformationLCR
                                                                                                                                    PRESENCE
optional },
    . . .
HS-SICH-Information-LCR-PSCH-ReconfRgst ::= SEQUENCE
   hsSICH-ID
                                          HS-SICH-ID,
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
   tdd-ChannelisationCode
                                           TDD-ChannelisationCode,
                                           ProtocolExtensionContainer { { HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
```

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HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-HS-SICH-ID
                                                    CRITICALITY ignore EXTENSION Extended-HS-SICH-ID
                                                                                                              PRESENCE optional },
    -- used if the HS-SICH identity has a value larger than 31
HS-SCCH-Information-768-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-768-PSCH-ReconfRqst
HS-SCCH-InformationItem-768-PSCH-ReconfRqst ::= SEQUENCE {
   hs-sccH-ID
                                         HS-SCCH-ID.
   timeSlot
                                         TimeSlot,
   midambleShiftAndBurstType768
                                         MidambleShiftAndBurstType768,
    tdd-ChannelisationCode768
                                         TDD-ChannelisationCode768,
   hS-SCCH-MaxPower
                                         DL-Power.
                                         HS-SICH-Information-768-PSCH-ReconfRgst,
   hS-SICH-Information-768
   iE-Extensions
                                         ProtocolExtensionContainer { { HS-SCCH-InformationItem-768-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
HS-SCCH-InformationItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Information-768-PSCH-ReconfRqst ::= SEQUENCE
   hsSICH-ID
                                         HS-SICH-ID,
   timeSlot
                                         TimeSlot,
   midambleShiftAndBurstType768
                                         MidambleShiftAndBurstType768,
   tdd-ChannelisationCode768
                                         TDD-ChannelisationCode768,
   iE-Extensions
                                         ProtocolExtensionContainer { { HS-SICH-Information-768-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                OPTIONAL,
    . . .
HS-SICH-Information-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-InformationExt-LCR-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfHSSCCHsinExt)) OF HS-SCCH-InformationItem-LCR-PSCH-ReconfRgst
Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst::= SEQUENCE {
   hS-SCCH-InformationModify-PSCH-ReconfRqst
                                                 HS-SCCH-InformationModify-PSCH-ReconfRqst
                                                                                                              OPTIONAL,
   hS-SCCH-InformationModify-LCR-PSCH-ReconfRgst
                                                HS-SCCH-InformationModify-LCR-PSCH-ReconfRqst
                                                                                                              OPTIONAL,
                                                 ProtocolExtensionContainer { { Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-hS-SCCH-InformationModify-768-PSCH-ReconfRqst
                                                            CRITICALITY reject EXTENSION HS-SCCH-InformationModify-768-PSCH-ReconfRqst
    PRESENCE
             optional } |
    -- 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
    PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only, used when there are more than maxNrOfHSSCCHs HS-SCCHs in the message.
```

```
HS-SCCH-InformationModifyItem-PSCH-ReconfRgst
                                               ::= SEQUENCE {
   hs-sccH-ID
                                            HS-SCCH-ID,
    timeSlot
                                            TimeSlot
                                                                                         OPTIONAL,
                                            MidambleShiftAndBurstType
    midambleShiftAndBurstType
                                                                                         OPTIONAL,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode
                                                                                         OPTIONAL,
    hS-SCCH-MaxPower
                                            DI - Power
                                                                                         OPTIONAL,
                                            HS-SICH-InformationModify-PSCH-ReconfRqst OPTIONAL,
    hS-SICH-Information
                                            ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
HS-SCCH-InformationModifyItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-InformationModify-PSCH-ReconfRqst
                                             ::= SEQUENCE {
   hsSICH-ID
                                            HS-SICH-ID,
                                                                         OPTIONAL,
    timeSlot
                                            TimeSlot
                                            MidambleShiftAndBurstType
    midambleShiftAndBurstType
                                                                        OPTIONAL,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode
                                                                         OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                         OPTIONAL,
HS-SICH-InformationModify-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-InformationModify-LCR-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst
HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRgst
                                                     ::= SEOUENCE
   hs-sccH-ID
                                            HS-SCCH-ID,
    timeSlotLCR
                                            TimeSlotLCR
                                                                                             OPTIONAL.
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                                             OPTIONAL,
    first-TDD-ChannelisationCode
                                            TDD-ChannelisationCode
                                                                                             OPTIONAL,
    second-TDD-ChannelisationCode
                                            TDD-ChannelisationCode
                                                                                             OPTIONAL,
    hS-SCCH-MaxPower
                                            DL-Power
                                                                                             OPTIONAL,
    hS-SICH-Information-LCR
                                            HS-SICH-InformationModify-LCR-PSCH-ReconfRqst OPTIONAL,
                                            ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-HS-SCCH-ID
                                                        CRITICALITY ignore EXTENSION Extended-HS-SCCH-ID
                                                                                                                     PRESENCE optional } |
    -- used if the HS-SCCH identity has a value larger than 31
    { ID id-UARFCNforNt
                                                        CRITICALITY ignore EXTENSION UARFCN
                                                                                                                     PRESENCE optional |
    -- Applicable to 1.28Mcps TDD when using multiple frequencies
    { ID id-HSSICH-ReferenceSignal-InformationModifyLCR
                                                            CRITICALITY reject
                                                                                     EXTENSION HSSICH-ReferenceSignal-InformationModifyLCR
    PRESENCE optional },
```

```
HS-SCCH-InformationModifyExt-LCR-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfHSSCCHsinExt)) OF HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRgst
HS-SICH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    hsSICH-ID
                                            HS-SICH-ID,
    timeSlotLCR
                                            TimeSlotLCR
                                                                    OPTIONAL,
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                    OPTIONAL,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode OPTIONAL,
                                            ProtocolExtensionContainer { { HS-SICH-InformationModify-LCR-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
HS-SICH-InformationModify-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-HS-SICH-ID
                                                        CRITICALITY ignore EXTENSION Extended-HS-SICH-ID
                                                                                                                    PRESENCE optional },
    -- used if the HS-SICH identity has a value larger than 31
HS-SCCH-InformationModify-768-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-768-PSCH-ReconfRqst
HS-SCCH-InformationModifyItem-768-PSCH-ReconfRqst ::= SEQUENCE {
    hs-sccH-ID
                                            HS-SCCH-ID.
    timeSlot
                                            TimeSlot.
                                                                                            OPTIONAL,
                                            MidambleShiftAndBurstType768,
    midambleShiftAndBurstType768
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768,
    hS-SCCH-MaxPower
                                            DL-Power
           OPTIONAL,
    hS-SICH-Information-768
                                            HS-SICH-InformationModify-768-PSCH-ReconfRgst OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-768-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
HS-SCCH-InformationModifyItem-768-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-InformationModify-768-PSCH-ReconfRqst
                                               ::= SEQUENCE {
    hsSICH-ID
                                            HS-SICH-ID,
    timeSlot
                                            TimeSlot
                                                                                            OPTIONAL,
                                            MidambleShiftAndBurstType768,
    midambleShiftAndBurstType768
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768.
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-SICH-InformationModify-768-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
HS-SICH-InformationModify-768-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
```

```
HS-SCCH-InformationModify-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-PSCH-ReconfRqst
Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfHSSCCHs)) OF Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRgst
Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst
                                                        ::= SEQUENCE {
    hs-sccH-ID
                                HS-SCCH-ID,
                                ProtocolExtensionContainer { { Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                        OPTIONAL,
Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                                                                                                                     PRESENCE optional },
    { ID id-Extended-HS-SCCH-ID
                                                        CRITICALITY ignore EXTENSION Extended-HS-SCCH-ID
    -- used if the HS-SCCH identity has a value larger than 31
E-PUCH-Information-PSCH-ReconfRgst ::= SEQUENCE {
    1TGI-Presence
                                            LTGI-Presence,
    sNPL-Reporting-Type
                                            SNPL-Reporting-Type,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    e-PUCH-Timeslot-Info
                                            E-PUCH-Timeslot-Info,
                                            ProtocolExtensionContainer { { E-PUCH-Information-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
E-PUCH-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-PUCH-Timeslot-Info ::= SEQUENCE (SIZE (1..maxNrOfE-PUCHSlots)) OF TimeSlot
Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst::= SEQUENCE {
    e-AGCH-Information-PSCH-ReconfRqst
                                            E-AGCH-Information-PSCH-ReconfRqst
                                                                                     OPTIONAL,
                                            ProtocolExtensionContainer { { Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Information-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationItem-PSCH-ReconfRqst
E-AGCH-InformationItem-PSCH-ReconfRgst ::= SEOUENCE {
    e-AGCH-ID
                                            E-AGCH-Id,
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
                                            TDD-ChannelisationCode,
    tdd-ChannelisationCode
    e-AGCH-MaxPower
                                            DL-Power,
                                            ProtocolExtensionContainer {    E-AGCH-InformationItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                        OPTIONAL,
    . . .
```

```
E-AGCH-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Modify-E-AGCH-Resource-Pool-PSCH-ReconfRgst::= SEQUENCE
    e-AGCH-InformationModify-PSCH-ReconfRgst
                                                    E-AGCH-InformationModify-PSCH-ReconfRgst
                                                                                                OPTIONAL,
                                                    ProtocolExtensionContainer { { Modify-E-AGCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
   OPTIONAL,
Modify-E-AGCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-InformationModify-PSCH-ReconfRqst::= SEOUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationModifyItem-PSCH-ReconfRqst
E-AGCH-InformationModifyItem-PSCH-ReconfRgst
                                                 ::= SEQUENCE {
    e-AGCH-ID
                                            E-AGCH-Id,
    timeSlot
                                            TimeSlot
                                                                        OPTIONAL,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType OPTIONAL,
                                            TDD-ChannelisationCode
    tdd-ChannelisationCode
                                                                        OPTIONAL,
    e-AGCH-MaxPower
                                            DL-Power
                                                                        OPTIONAL,
   iE-Extensions
                                            ProtocolExtensionContainer { { E-AGCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
E-AGCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Delete-From-E-AGCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF Delete-From-E-AGCH-Resource-Poolitem-PSCH-ReconfRqst
                                                         ::= SEQUENCE {
Delete-From-E-AGCH-Resource-PoolItem-PSCH-ReconfRast
    e-AGCH-ID
   iE-Extensions
                                        ProtocolExtensionContainer { { Delete-From-E-AGCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
Delete-From-E-AGCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-Information-PSCH-ReconfRqst ::= SEQUENCE {
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
    e-HICH-MaxPower
                                            DL-Power,
                                            ProtocolExtensionContainer { { E-HICH-Information-PSCH-ReconfRqst-ExtIEs} } 
   iE-Extensions
                                                                                                                                OPTIONAL,
E-HICH-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

904

```
E-PUCH-Information-768-PSCH-ReconfRgst ::= SEQUENCE {
   1TGI-Presence
                                            LTGI-Presence,
    sNPL-Reporting-Type
                                            SNPL-Reporting-Type,
                                            MidambleShiftAndBurstType768,
   midambleShiftAndBurstType768
    e-PUCH-Timeslot-Info
                                            E-PUCH-Timeslot-Info,
    iE-Extensions
                                            ProtocolExtensionContainer { { E-PUCH-Information-768-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                        OPTIONAL.
E-PUCH-Information-768-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst::= SEQUENCE {
                                                E-AGCH-Information-768-PSCH-ReconfRgst
    e-AGCH-Information-768-PSCH-ReconfRgst
                                                                                             OPTIONAL,
                                            ProtocolExtensionContainer { { Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRgst-ExtIEs} }
    iE-Extensions
   OPTIONAL,
Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
E-AGCH-Information-768-PSCH-ReconfRgst::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationItem-768-PSCH-ReconfRgst
E-AGCH-InformationItem-768-PSCH-ReconfRgst ::= SEQUENCE
    e-AGCH-ID
                                            E-AGCH-Id,
    timeSlot
                                            TimeSlot,
                                            MidambleShiftAndBurstType768,
    midambleShiftAndBurstType768
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768,
    e-AGCH-MaxPower
                                            DL-Power,
                                            ProtocolExtensionContainer { { E-AGCH-InformationItem-768-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                        OPTIONAL.
E-AGCH-InformationItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst::= SEQUENCE {
    e-AGCH-InformationModify-768-PSCH-ReconfRqst
                                                        E-AGCH-InformationModify-768-PSCH-ReconfRqst
                                                                                                                     OPTIONAL,
   iE-Extensions
                                                    ProtocolExtensionContainer { { Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
    . . .
Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-InformationModify-768-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationModifyItem-768-PSCH-ReconfRqst
```

```
E-AGCH-InformationModifyItem-768-PSCH-ReconfRgst
                                                     ::= SEQUENCE {
    e-AGCH-ID
                                            E-AGCH-Id.
    timeSlot
                                            TimeSlot.
                                                                             OPTIONAL,
    midambleShiftAndBurstType768
                                            MidambleShiftAndBurstType768
                                                                             OPTIONAL,
                                            TDD-ChannelisationCode768
    tdd-ChannelisationCode768
                                                                             OPTIONAL,
    e-AGCH-MaxPower
                                            DI - Power
                                                                             OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { E-AGCH-InformationModifyItem-768-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    . . .
E-AGCH-InformationModifyItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-Information-768-PSCH-ReconfRqst ::= SEQUENCE
    midambleShiftAndBurstType768
                                            MidambleShiftAndBurstType768,
                                            TDD-ChannelisationCode768,
    tdd-ChannelisationCode768
    e-HICH-MaxPower
                                            DL-Power.
   iE-Extensions
                                            ProtocolExtensionContainer { { E-HICH-Information-768-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                         OPTIONAL,
E-HICH-Information-768-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-PUCH-Information-LCR-PSCH-ReconfRgst ::= SEQUENCE {
   lTGI-Presence
                                            LTGI-Presence,
    sNPL-Reporting-Type
                                            SNPL-Reporting-Type,
    e-PUCH-Timeslot-InfoLCR
                                            E-PUCH-Timeslot-InfoLCR
                                                                         OPTIONAL,
    -- This E-PUCH Timeslot Information is for the first Frequency repetition, E-PUCH timeslot information for Frequency repetitions 2 and on,
should be defined in MultipleFreq-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRqst.
                                            ProtocolExtensionContainer { { E-PUCH-Information-LCR-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
E-PUCH-Information-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UARFCNforNt
                                                                                 CRITICALITY ignore
                    EXTENSION UARFCN
                                                                                                 PRESENCE optional |
    -- This is the UARFCN for the first Frequency repetition. Mandatory for 1.28Mcps TDD when using multiple frequencies.
    { ID id-MultipleFreq-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRqst
                                                                                CRITICALITY reject
                    EXTENSION MultipleFreq-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRqst PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies. This E-PUCH Information is for the 2nd and beyond frequencies.
    . . .
E-PUCH-Timeslot-InfoLCR ::= SEQUENCE (SIZE (1..maxNrOfE-PUCHSlotsLCR)) OF E-PUCH-Timeslot-Item-InfoLCR
E-PUCH-Timeslot-Item-InfoLCR ::= SEQUENCE {
    timeSlot
                                            TimeSlotLCR,
    midambleShiftAndBurstType
                                            MidambleShiftLCR,
    e-PUCH-Codelist-LCR
                                            E-PUCH-Codelist-LCR,
    iE-Extensions
                                            ProtocolExtensionContainer { { E-PUCH-Timeslot-Item-InfoLCR-ExtIEs} }
                                                                                                                         OPTIONAL,
```

```
E-PUCH-Timeslot-Item-InfoLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-PUCH-Codelist-LCR ::= SEOUENCE (SIZE (1..maxNrOfEPUCHcodes)) OF TDD-ChannelisationCode
Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   e-AGCH-Information-LCR-PSCH-ReconfRqst E-AGCH-Information-LCR-PSCH-ReconfRqst,
                                          ProtocolExtensionContainer { { Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Information-LCR-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationItem-LCR-PSCH-ReconfRqst
E-AGCH-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE
   e-AGCH-ID
                                          E-AGCH-Id,
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
   first-TDD-ChannelisationCode
                                          TDD-ChannelisationCode,
    second-TDD-ChannelisationCode
                                          TDD-ChannelisationCode,
   e-AGCH-MaxPower
                                          DL-Power,
                                          ProtocolExtensionContainer { { E-AGCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
{ ID id-UARFCNforNt
                                          CRITICALITY ignore
                                                                 EXTENSION UARFON
                                                                                        PRESENCE optional }.
   -- Mandatory for 1.28Mcps TDD when using multiple frequencies
Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRgst::= SEQUENCE {
   e-AGCH-InformationModify-LCR-PSCH-ReconfRqst E-AGCH-InformationModify-LCR-PSCH-ReconfRqst,
                                                  ProtocolExtensionContainer { { Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-InformationModify-LCR-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationModifyItem-LCR-PSCH-ReconfRqst
E-AGCH-InformationModifyItem-LCR-PSCH-ReconfRqst
                                                  ::= SEQUENCE {
   e-AGCH-ID
                                          E-AGCH-Id,
```

```
timeSlotLCR
                                            TimeSlotLCR
                                                                    OPTIONAL,
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                    OPTIONAL,
    first-TDD-ChannelisationCode
                                            TDD-ChannelisationCode OPTIONAL.
    second-TDD-ChannelisationCode
                                            TDD-ChannelisationCode OPTIONAL,
    e-AGCH-MaxPower
                                            DL-Power
                                                                    OPTIONAL.
                                            ProtocolExtensionContainer { { E-AGCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
E-AGCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UARFCNforNt
                                            CRITICALITY ignore
                                                                    EXTENSION UARFON
                                                                                             PRESENCE optional },
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies
Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    e-HICH-Information-LCR-PSCH-ReconfRgst E-HICH-Information-LCR-PSCH-ReconfRgst,
                                            ProtocolExtensionContainer { Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRgst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRast-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-Information-LCR-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfEHICHs)) OF E-HICH-InformationItem-LCR-PSCH-ReconfRgst
E-HICH-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    e-HICH-ID-TDD
                                            E-HICH-ID-TDD,
    e-HICH-Type
                                            E-HICH-Type,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
                                            TimeSlotLCR,
    timeSlotLCR
    midambleShiftLCR
                                            MidambleShiftLCR,
    e-HICH-MaxPower
                                            DL-Power,
    iE-Extensions
                                            ProtocolExtensionContainer { { E-HICH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                        OPTIONAL.
E-HICH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extended-E-HICH-ID-TDD
                                            CRITICALITY ignore EXTENSION Extended-E-HICH-ID-TDD PRESENCE optional \|
   -- Applicable to 1.28Mcps TDD only when the E-HICH identity has a value larger than 31.
                                            CRITICALITY ignore
   { ID id-UARFCNforNt
                                                                    EXTENSION UARFCN
                                                                                                 PRESENCE optional },
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies
Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    e-HICH-InformationModify-LCR-PSCH-ReconfRqst
                                                    E-HICH-InformationModify-LCR-PSCH-ReconfRgst,
                                                    ProtocolExtensionContainer { { Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
   OPTIONAL,
```

```
Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-InformationModify-LCR-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfEHICHs)) OF E-HICH-InformationModifyItem-LCR-PSCH-ReconfRgst
E-HICH-InformationModifyItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   e-HICH-ID-TDD
                                          E-HICH-ID-TDD,
    e-HICH-Type
                                          E-HICH-Type
                                                                  OPTIONAL,
                                          TDD-ChannelisationCode OPTIONAL,
   tdd-ChannelisationCode
   timeSlotLCR
                                          TimeSlotLCR
                                                                  OPTIONAL,
   midambleShiftLCR
                                          MidambleShiftLCR
                                                                  OPTIONAL,
   e-HICH-MaxPower
                                          DL-Power
                                                                  OPTIONAL.
                                          ProtocolExtensionContainer { { E-HICH-InformationModifyItem-LCR-PSCH-ReconfRgst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
E-HICH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-E-HICH-ID-TDD
                                          CRITICALITY ignore EXTENSION Extended-E-HICH-ID-TDD PRESENCE optional }
    --Applicable to 1.28Mcps TDD only when the E-HICH identity has a value larger than 31.
   { ID id-UARFCNforNt
                                          CRITICALITY ignore
                                                                  EXTENSION UARFCN
                                                                                             PRESENCE optional },
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies
Delete-From-E-HICH-Resource-Pool-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfEHICHs)) OF Delete-From-E-HICH-Resource-PoolItem-PSCH-ReconfRgst
                                                    ::= SEQUENCE {
Delete-From-E-HICH-Resource-PoolItem-PSCH-ReconfRqst
   e-HICH-ID-TDD
                                                  E-HICH-ID-TDD,
                                                  ProtocolExtensionContainer { { Delete-From-E-HICH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
       OPTIONAL,
Delete-From-E-HICH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                                          CRITICALITY ignore EXTENSION Extended-E-HICH-ID-TDD PRESENCE optional },
    { ID id-Extended-E-HICH-ID-TDD
    -- Applicable to 1.28Mcps TDD only when the E-HICH identity has a value larger than 31.
SYNC-UL-Partition-LCR ::= SEQUENCE {
   eRUCCH-SYNC-UL-codes-bitmap
                                              BIT STRING (SIZE (8)),
                                              iE-Extensions
                                                                                                                     OPTIONAL.
SYNC-UL-Partition-LCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
Delete-From-HS-SCCH-Resource-PoolExt-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfHSSCCHsinExt)) OF Delete-From-HS-SCCH-Resource-PoolItem-PSCH-
ReconfRqst
```

```
MultipleFreq-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-Container
{{ MultipleFreq-E-PUCH-Timeslot-InformationItemIE-LCR-PSCH-ReconfRqst}}
--Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreg-E-PUCH-Timeslot-InformationItemIE-LCR-PSCH-ReconfRgst NBAP-PROTOCOL-IES ::= {
    { ID id-MultipleFreq-E-PUCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst
                                                                              CRITICALITY ignore
                                                                                                                 TYPE MultipleFreq-E-PUCH-
Timeslot-Information-LCRItem-PSCH-ReconfRqst
                                                   PRESENCE optional }
MultipleFreq-E-PUCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst ::= SEQUENCE {
    e-PUCH-Timeslot-InfoLCR
                                           E-PUCH-Timeslot-InfoLCR
                                                                       OPTIONAL,
    uARFCN
    iE-Extensions
                                                           ProtocolExtensionContainer { { MultipleFreq-E-PUCH-Timeslot-Information-LCRItem-PSCH-
ReconfRqst-ExtIEs} }
                           OPTIONAL,
MultipleFreg-E-PUCH-Timeslot-Information-LCRItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE
__ *********************
PhysicalSharedChannelReconfigurationResponse ::= SEQUENCE
                                                   {{PhysicalSharedChannelReconfigurationResponse-IEs}},
    protocolIEs
                       ProtocolIE-Container
    protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationResponse-Extensions}}
                                                                                                                               OPTIONAL,
PhysicalSharedChannelReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
           id-CriticalityDiagnostics
                                           CRITICALITY
                                                                       TYPE
                                                                                   CriticalityDiagnostics
                                                                                                                      PRESENCE
                                                                                                                                     optional
                                                           ignore
    },
PhysicalSharedChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-HICH-TimeOffset
                                                           CRITICALITY reject EXTENSION E-HICH-TimeOffset
                   PRESENCE optional }
                                                           CRITICALITY reject EXTENSION E-HICH-TimeOffsetLCR
    { ID id-E-HICH-TimeOffsetLCR
                   PRESENCE optional } |
    { ID id-HSDSCH-Common-System-Information-ResponseFDD
                                                           CRITICALITY ignore EXTENSION HSDSCH-Common-System-Information-ResponseFDD
    PRESENCE optional } |
    { ID id-HSDSCH-Paging-System-Information-ResponseFDD
                                                           CRITICALITY ignore EXTENSION HSDSCH-Paging-System-Information-ResponseFDD
    PRESENCE optional } |
    { ID id-UARFCNforNt
                                                           CRITICALITY reject EXTENSION UARFON
                   PRESENCE optional |
    -- Applicable to 1.28Mcps TDD when using multiple frequencies. This is the UARFCN for the first Frequency repetition.
    { ID id-E-HICH-TimeOffset-Extension
                                                           CRITICALITY reject EXTENSION E-HICH-TimeOffset-ExtensionLCR
                   PRESENCE optional }
```

```
-- Applicable to 1.28Mcps TDD when using multiple frequencies. This E-HICH-TimeOffset-ExtensionLCR is the E-HICH Time Offset LCR for the 2nd
and beyond frequencies.
   { ID id-Common-EDCH-System-Information-ResponseFDD CRITICALITY ignore EXTENSION Common-EDCH-System-Information-ResponseFDD
   PRESENCE optional } |
   -- FDD only
   { ID id-HSDSCH-Common-System-Information-ResponseLCR
                                                 CRITICALITY ignore EXTENSION HSDSCH-Common-System-Information-ResponseLCR
   PRESENCE optional } |
   { ID id-HSDSCH-Paging-System-Information-ResponseLCR
                                                 CRITICALITY ignore EXTENSION HSDSCH-Paging-System-Information-ResponseLCR
   PRESENCE optional }
   PRESENCE optional },
   . . .
E-HICH-TimeOffset-ExtensionLCR ::= SEOUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-Container{{ Multiple-E-HICH-TimeOffsetLCR }}
Multiple-E-HICH-TimeOffsetLCR NBAP-PROTOCOL-IES ::= {
   MultipleFreg-E-HICH-TimeOffsetLCR ::= SEQUENCE {
   e-HICH-TimeOffsetLCR
                                    E-HICH-TimeOffsetLCR,
   uARFCN
                                    ProtocolExtensionContainer { { MultipleFreq-E-HICH-TimeOffsetLCR-ExtIEs} }
   iE-Extensions
                                                                                                        OPTIONAL,
MultipleFreq-E-HICH-TimeOffsetLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     *****************
-- PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE
__ *********************
PhysicalSharedChannelReconfigurationFailure ::= SEQUENCE {
   protocolIEs
                   ProtocolIE-Container
                                          {{PhysicalSharedChannelReconfigurationFailure-IEs}},
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationFailure-Extensions}}
                                                                                                         OPTIONAL,
PhysicalSharedChannelReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    ID id-CauseLevel-PSCH-ReconfFailure
                                                                                               PRESENCE mandatory } |
                                       CRITICALITY ignore TYPE CauseLevel-PSCH-ReconfFailure
                                                                                               PRESENCE optional },
    ID id-CriticalityDiagnostics
                                       CRITICALITY ignore TYPE CriticalityDiagnostics
   . . .
PhysicalSharedChannelReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-E-HICH-TimeOffset-ReconfFailureTDD
                                                CRITICALITY ignore EXTENSION E-HICH-TimeOffset-ReconfFailureTDD
                      PRESENCE optional }
   PRESENCE
optional },
```

```
CauseLevel-PSCH-ReconfFailure ::= CHOICE {
    generalCause
                                              General CauseList-PSCH-ReconfFailure.
   setSpecificCause
                                              SetSpecificCauseList-PSCH-ReconfFailureTDD,
    extension-CauseLevel-PSCH-ReconfFailure
                                              Extension-CauseLevel-PSCH-ReconfFailure
GeneralCauseList-PSCH-ReconfFailure ::= SEOUENCE {
   cause
                              ProtocolExtensionContainer { { GeneralCauseItem-PSCH-ReconfFailure-ExtIEs} }
   iE-Extensions
                                                                                                                   OPTIONAL,
GeneralCauseItem-PSCH-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SetSpecificCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
   unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD
                                                                                                                   OPTIONAL,
   unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD
                                                                                                                   OPTIONAL,
                                                 ProtocolExtensionContainer { { SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPDSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PDSCHSetItemIE-PSCH-ReconfFailureTDD }}
Unsuccessful-PDSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::=
    { ID id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD CRITICALITY ignore TYPE Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD
   PRESENCE mandatory }
Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
   pDSCHSet-ID
                          PDSCHSet-ID,
   cause
                          Cause,
                          iE-Extensions
                                                                                                                   OPTIONAL,
Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPUSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PUSCHSetItemIE-PSCH-ReconfFailureTDD }}
Unsuccessful-PUSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
```

```
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD CRITICALITY ignore TYPE Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD
    PRESENCE mandatory }
Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
                            PUSCHSet-ID,
    pUSCHSet-ID
    cause
                            Cause,
    iE-Extensions
                            ProtocolExtensionContainer { {Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }
                                                                                                                         OPTIONAL,
Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Extension-CauseLevel-PSCH-ReconfFailure ::= ProtocolIE-Single-Container {{ Extension-CauseLevel-PSCH-ReconfFailureIE }}
Extension-CauseLevel-PSCH-ReconfFailureIE NBAP-PROTOCOL-IES ::= {
     ID id-UARFCNSpecificCauseList CRITICALITY ignore TYPE UARFCNSpecificCauseList-PSCH-ReconfFailureTDD
                                                                                                                 PRESENCE mandatory
UARFCNSpecificCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ Unsuccessful-
UARFCNItemIE-PSCH-ReconfFailureTDD }}
Unsuccessful-UARFCNItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD CRITICALITY ignore TYPE Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD
                                                                                                                                        PRESENCE
mandatory }
Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
    uARFCN
                            UARFCN,
    -- Used for 1.28 Mcps TDD to indicate the carrier on which HSDPA or HSUPA resources configuration failure occurs.
    cause
                            ProtocolExtensionContainer { {Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD-ExtIEs} }
                                                                                                                         OPTIONAL,
    iE-Extensions
    . . .
Unsuccessful-UARFCNItem-PSCH-ReconffailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
           id-HS-Cause CRITICALITY ignore
                                                                                     optional } |
                                                EXTENSION Cause
                                                                        PRESENCE
    -- Used to indicate the cause of HSDPA related configuration failure.
           id-E-Cause CRITICALITY ignore
                                                                                     optional},
                                                EXTENSION Cause
                                                                        PRESENCE
    -- Used to indicate the cause of E-DCH related configuration failure.
    . . .
E-HICH-TimeOffset-ReconfFailureTDD ::= SEQUENCE (SIZE (1..maxFrequencyinCell)) OF ProtocolIE-Single-Container{{ Multiple-E-HICH-TimeOffsetLCR }}
Common-System-Information-ResponseLCR::= SEQUENCE {
    hSDSCH-Common-System-Information-ResponseLCR
                                                        HSDSCH-Common-System-Information-ResponseLCR,
    hSDSCH-Paging-System-Information-ResponseLCR
                                                        HSDSCH-Paging-System-Information-ResponseLCR
                                                                                                                         OPTIONAL,
    common-EDCH-System-Information-ResponseLCR
                                                        Common-EDCH-System-Information-ResponseLCR,
    iE-Extensions
                                                        ProtocolExtensionContainer { { Common-System-Information-ResponseLCR-ExtIEs } }
    OPTIONAL,
```

```
Common-System-Information-ResponseLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RESET REQUEST
   ****************
ResetRequest ::= SEQUENCE {
   protocolIEs
                                                    {{ResetRequest-IEs}},
                          ProtocolIE-Container
   protocolExtensions
                          ProtocolExtensionContainer
                                                  {{ResetRequest-Extensions}}
                                                                                 OPTIONAL,
ResetRequest-IEs NBAP-PROTOCOL-IES ::= {
    {ID id-ResetIndicator
                             CRITICALITY ignore
                                                           ResetIndicator
                                                                              PRESENCE
                                                                                        mandatory},
    . . .
ResetRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
ResetIndicator ::= CHOICE {
   communicationContext
                                 CommunicationContextList-Reset,
   communicationControlPort
                                 CommunicationControlPortList-Reset,
                                 NULL,
   nodeB
CommunicationContextList-Reset ::= SEQUENCE {
   communicationContextInfoList-Reset
                                        CommunicationContextInfoList-Reset,
                                        ProtocolExtensionContainer { (CommunicationContextItem-Reset-ExtIEs) }
   iE-Extensions
                                                                                                               OPTIONAL,
CommunicationContextItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
OF ProtocolIE-Single-Container {{
CommunicationContextInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCommunicationContext))
CommunicationContextInfoItemIE-Reset }}
CommunicationContextInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationContextInfoItem-Reset
                                                    CRITICALITY reject
                                                                            TYPE CommunicationContextInfoItem-Reset
                                                                                                                         PRESENCE mandatory }
CommunicationContextInfoItem-Reset ::= SEQUENCE {
    communicationContextType-Reset
                                            CommunicationContextType-Reset,
                                            ProtocolExtensionContainer { { CommunicationContextInfoItem-Reset-ExtIEs} }
    iE-Extensions
                                                                                                                                        OPTIONAL.
CommunicationContextInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
CommunicationContextType-Reset ::= CHOICE {
    cRNC-CommunicationContextID
                                            CRNC-CommunicationContextID,
    nodeB-CommunicationContextID
                                            NodeB-CommunicationContextID,
CommunicationControlPortList-Reset ::= SEQUENCE {
    communicationControlPortInfoList-Reset
                                                CommunicationControlPortInfoList-Reset,
                                                ProtocolExtensionContainer { (CommunicationControlPortItem-Reset-ExtIEs) }
    iE-Extensions
                                                                                                                                        OPTIONAL,
CommunicationControlPortItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationControlPortInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCCPinNodeB)) OF ProtocolIE-Single-Container
{{CommunicationControlPortInfoItemIE-Reset }}
CommunicationControlPortInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationControlPortInfoItem-Reset
                                                        CRITICALITY reject
                                                                                TYPE CommunicationControlPortInfoItem-Reset
                                                                                                                                         PRESENCE
mandatory }
```

```
CommunicationControlPortInfoItem-Reset ::= SEQUENCE {
    communicationControlPortID
                                       CommunicationControlPortID,
    iE-Extensions
                                       ProtocolExtensionContainer { {CommunicationControlPortInfoItem-Reset-ExtIEs} } OPTIONAL,
CommunicationControlPortInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RESET RESPONSE
ResetResponse ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                       {{ResetResponse-IEs}},
                           ProtocolExtensionContainer
                                                       {{ResetResponse-Extensions}}
    protocolExtensions
                                                                                              OPTIONAL,
ResetResponse-IEs NBAP-PROTOCOL-IES ::= {
    {ID id-CriticalityDiagnostics
                                       CRITICALITY
                                                                   TYPE
                                                                           CriticalityDiagnostics
                                                                                                                      PRESENCE
                                                                                                                                     optional},
                                                       ignore
    . . .
ResetResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- INFORMATION EXCHANGE INITIATION REQUEST
__ *******************************
InformationExchangeInitiationRequest ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                       {{InformationExchangeInitiationRequest-IEs}},
                           ProtocolExtensionContainer {{InformationExchangeInitiationRequest-Extensions}}
    protocolExtensions
                                                                                                                      OPTIONAL,
InformationExchangeInitiationRequest-IES NBAP-PROTOCOL-IES ::= {
    { ID id-InformationExchangeID
                                                       CRITICALITY reject
                                                                              TYPE InformationExchangeID
    PRESENCE mandatory } |
```

```
{ ID id-InformationExchangeObjectType-InfEx-Rgst
                                                      CRITICALITY reject
                                                                             TYPE InformationExchangeObjectType-InfEx-Rqst PRESENCE mandatory
} |
    { ID id-InformationType
                                                      CRITICALITY reject
                                                                             TYPE InformationType
   PRESENCE mandatory } |
    { ID id-InformationReportCharacteristics
                                                      CRITICALITY reject
                                                                             TYPE InformationReportCharacteristics
   PRESENCE mandatory },
InformationExchangeInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rqst ::= CHOICE {
   cell
                                  Cell-InfEx-Rast,
    . . .
Cell-InfEx-Rgst ::= SEQUENCE {
   c-ID
                                  C-ID.
   iE-Extensions
                                  ProtocolExtensionContainer { { CellItem-InfEx-Rgst-ExtIEs} }
                                                                                                                    OPTIONAL,
    . . .
CellItem-InfEx-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
  INFORMATION EXCHANGE INITIATION RESPONSE
        ********************
InformationExchangeInitiationResponse ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{InformationExchangeInitiationResponse-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer
                                                     {{InformationExchangeInitiationResponse-Extensions}}
                                                                                                                    OPTIONAL,
InformationExchangeInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
     ID id-InformationExchangeID
                                                  CRITICALITY ignore TYPE InformationExchangeID
                                                                                                                    PRESENCE mandatory } |
     ID id-InformationExchangeObjectType-InfEx-Rsp CRITICALITY ignore TYPE InformationExchangeObjectType-InfEx-Rsp
                                                                                                                    PRESENCE optional } |
    { ID id-CriticalityDiagnostics
                                                  CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                    PRESENCE optional },
    . . .
InformationExchangeInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rsp ::= CHOICE {
                              Cell-InfEx-Rsp,
   cell
    . . .
```

```
Cell-InfEx-Rsp ::= SEQUENCE {
   requestedDataValue
                                RequestedDataValue,
   iE-Extensions
                                ProtocolExtensionContainer { { CellItem-InfEx-Rsp-ExtIEs} }
                                                                                                           OPTIONAL,
CellItem-InfEx-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ****************
-- INFORMATION EXCHANGE INITIATION FAILURE
  ******************
InformationExchangeInitiationFailure ::= SEQUENCE {
                                                  {{InformationExchangeInitiationFailure-IEs}},
   protocolIEs
                        ProtocolIE-Container
   protocolExtensions
                        ProtocolExtensionContainer
                                                 {{InformationExchangeInitiationFailure-Extensions}}
                                                                                                           OPTIONAL,
   . . .
InformationExchangeInitiationFailure-IES NBAP-PROTOCOL-IES ::= {
     ID id-InformationExchangeID
                                   CRITICALITY ignore
                                                            TYPE InformationExchangeID
                                                                                                       PRESENCE
                                                                                                                  mandatory
     ID id-Cause
                                   CRITICALITY ignore
                                                                                                                  mandatory
                                                            TYPE Cause
                                                                                                       PRESENCE
   { ID id-CriticalityDiagnostics
                                   CRITICALITY ignore
                                                            TYPE CriticalityDiagnostics
                                                                                                       PRESENCE
                                                                                                                  optional
   . . .
InformationExchangeInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    -- INFORMATION REPORT
    *******************
InformationReport ::= SEQUENCE {
                                              {{InformationReport-IEs}},
   protocolIEs
                         ProtocolIE-Container
                         ProtocolExtensionContainer {{InformationReport-Extensions}}
   protocolExtensions
                                                                                     OPTIONAL,
   . . .
InformationReport-IES NBAP-PROTOCOL-IES ::= {
   { ID id-InformationExchangeID
                                                  CRITICALITY ignore TYPE InformationExchangeID
                                                                                                                         PRESENCE
mandatory }
   { ID id-InformationExchangeObjectType-InfEx-Rprt
                                                 CRITICALITY ignore TYPE InformationExchangeObjectType-InfEx-Rprt
                                                                                                                         PRESENCE
mandatory },
```

```
InformationReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rprt ::= CHOICE {
   cell
                                 Cell-Inf-Rprt,
   . . .
Cell-Inf-Rprt ::= SEQUENCE {
   requestedDataValueInformation
                                 RequestedDataValueInformation,
   iE-Extensions
                                 ProtocolExtensionContainer {{ CellItem-Inf-Rprt-ExtIEs }}
                                                                                                           OPTIONAL,
   . . .
CellItem-Inf-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ****************
  INFORMATION EXCHANGE TERMINATION REQUEST
        *****************
InformationExchangeTerminationRequest ::= SEQUENCE {
                                                    {{InformationExchangeTerminationRequest-IEs}},
   protocolIEs
                         ProtocolIE-Container
                          ProtocolExtensionContainer
                                                   {{InformationExchangeTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                               OPTIONAL,
InformationExchangeTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
         id-InformationExchangeID
   { ID
                                            CRITICALITY
                                                           ignore
                                                                             TYPE
                                                                                     InformationExchangeID
                                                                                                                      PRESENCE
   mandatory },
InformationExchangeTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- INFORMATION EXCHANGE FAILURE INDICATION
__ ********************************
InformationExchangeFailureIndication ::= SEQUENCE {
                                                        {{InformationExchangeFailureIndication-IEs}},
   protocolIEs
                       ProtocolIE-Container
   protocolExtensions
                             ProtocolExtensionContainer {{InformationExchangeFailureIndication-Extensions}}
                                                                                                                             OPTIONAL,
```

```
InformationExchangeFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
     ID id-InformationExchangeID CRITICALITY ignore
                                                              TYPE InformationExchangeID
                                                                                             PRESENCE mandatory } |
     ID id-Cause
                                   CRITICALITY ignore
                                                              TYPE Cause
                                                                                             PRESENCE mandatory },
    . . .
InformationExchangeFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    *******************
-- CELL SYNCHRONISATION INITIATION REQUEST TDD
CellSynchronisationInitiationRequestTDD ::= SEQUENCE {
                                                       {{CellSynchronisationInitiationRequestTDD-IEs}},
   protocolIEs
                           ProtocolIE-Container
                           ProtocolExtensionContainer
                                                     {{CellSynchronisationInitiationRequestTDD-Extensions}}
   protocolExtensions
                                                                                                                OPTIONAL,
CellSynchronisationInitiationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID
                                          CRITICALITY
                                                                      TYPE
                                                                             C-ID
                                                                                                                                   PRESENCE
   mandatory } |
    { ID
          id-cellSyncBurstRepetitionPeriod
                                                                                         CellSyncBurstRepetitionPeriod
                                                      CRITICALITY
                                                                      reject
                                                                                  TYPE
                                                                                                                                   PRESENCE
   mandatory } |
           id-timeslotInfo-CellSyncInitiationRgstTDD CRITICALITY
                                                                      reject
                                                                                  TYPE
                                                                                         TimeslotInfo-CellSyncInitiationRgstTDD
               optional
                        } -- Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.
    { ID id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD
                                                                 CRITICALITY
                                                                                  reject
                                                                                             TYPE
                                                                                                                CellSyncBurstTransInit-
CellSyncInitiationRqstTDD
                               PRESENCE
                                          optional
                                                     } -- Applicable to 3.84Mcps TDD only
          id-CellSyncBurstMeasureInit-CellSyncInitiationRgstTDD
                                                                      CRITICALITY
                                                                                     reject
                                                                                                                TYPE CellSyncBurstMeasureInit-
CellSyncInitiationRqstTDD
                               PRESENCE
                                          optional }, -- Applicable to 3.84Mcps TDD only
CellSynchronisationInitiationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ID id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD
                                                                  CRITICALITY reject EXTENSION SYNCDlCodeId-TransInitLCR-
CellSyncInitiationRqstTDD PRESENCE optional } -- Applicable to 1.28Mcps TDD only
    { ID id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD CRITICALITY reject EXTENSION SYNCDlCodeId-MeasureInitLCR-
CellSyncInitiationRqstTDD PRESENCE optional }, -- Applicable to 1.28Mcps TDD only
    . . .
TimeslotInfo-CellSyncInitiationRqstTDD::= SEQUENCE (SIZE (1..15)) OF TimeSlot
CellSyncBurstTransInit-CellSyncInitiationRqstTDD::= SEQUENCE {
    cSBTransmissionID
                                          CSBTransmissionID,
    sfn
    cellSyncBurstCode
                                          CellSyncBurstCode,
                                          CellSyncBurstCodeShift,
    cellSyncBurstCodeShift
    initialDLTransPower
                                          DL-Power,
```

```
ProtocolExtensionContainer { { CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL.
    . . .
CellSyncBurstTransInit-CellSyncInitiationRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD::= SEQUENCE
    cSBMeasurementID
                                          CSBMeasurementID,
    cellSyncBurstCode
                                          CellSyncBurstCode,
    cellSyncBurstCodeShift
                                          CellSyncBurstCodeShift,
    synchronisationReportType
                                          SynchronisationReportType,
                                                                                 OPTIONAL,
    synchronisationReportCharacteristics
                                          SynchronisationReportCharacteristics,
                                          ProtocolExtensionContainer { { CellSyncBurstMeasureInit-CellSyncInitiationRgstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD::= SEQUENCE {
    cSBTransmissionID
                                          CSBTransmissionID,
   sfn
                                          SFN,
   uARFCN
                                          UARFCN,
                                          SYNCDlCodeId,
    sYNCDlCodeId
   dwPCH-Power
                                          DwPCH-Power,
                                          iE-Extensions
   OPTIONAL,
    . . .
SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD::= SEQUENCE {
    cSBMeasurementID
                                          CSBMeasurementID,
   sfn
                                          SFN
                                                                                 OPTIONAL,
   11ARFCN
                                          UARFCN,
    sYNCDlCodeId
                                          SYNCDlCodeId,
    synchronisationReportType
                                          SynchronisationReportType,
    synchronisationReportCharacteristics
                                          SynchronisationReportCharacteristics,
                                          ProtocolExtensionContainer { { SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD-ExtIEs } }
   iE-Extensions
   OPTIONAL,
    . . .
SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
CELL SYNCHRONISATION INITIATION RESPONSE TDD
CellSynchronisationInitiationResponseTDD ::= SEQUENCE {
                                                       {{CellSynchronisationInitiationResponseTDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
                           ProtocolExtensionContainer
                                                     {{CellSynchronisationInitiationResponseTDD-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
    . . .
CellSynchronisationInitiationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationInitiationResponseTDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-CriticalityDiagnostics
                                          CRITICALITY ignore
                                                                  TYPE CriticalityDiagnostics
                                                                                                                     PRESENCE optional },
  CELL SYNCHRONISATION INITIATION FAILURE TDD
CellSynchronisationInitiationFailureTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                       {{CellSynchronisationInitiationFailureTDD-IEs}},
                                                      {{CellSynchronisationInitiationFailureTDD-Extensions}}
   protocolExtensions
                           ProtocolExtensionContainer
                                                                                                                OPTIONAL,
    . . .
CellSynchronisationInitiationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationInitiationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Cause
                                          CRITICALITY ignore
                                                                  TYPE Cause
                                                                                                                 PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics
                                          CRITICALITY ignore
                                                                  TYPE CriticalityDiagnostics
                                                                                                                PRESENCE optional },
  CELL SYNCHRONISATION RECONFIGURATION REQUEST TDD
    CellSynchronisationReconfigurationRequestTDD ::= SEQUENCE
   protocolIEs
                           ProtocolIE-Container
                                                       {{CellSynchronisationReconfigurationRequestTDD-IEs}},
                                                     {{CellSynchronisationReconfigurationRequestTDD-Extensions}}
   protocolExtensions
                           ProtocolExtensionContainer
                                                                                                                     OPTIONAL,
```

```
CellSynchronisationReconfigurationRequestTDD-IES NBAP-PROTOCOL-IES ::= {
          id-C-ID
                                           CRITICALITY
                                                                               C-ID
                                                                                                                                       PRESENCE
                                                            reject
                                                                        TYPE
       mandatory }|
    { ID
           id-TimeSlot
                                           CRITICALITY
                                                           reject
                                                                        TYPE
                                                                               TimeSlot
                                                                                                                               PRESENCE
    mandatory }|
    -- Applicable to 3.84Mcps TDD only. For 1.28Mcps TDD, the CRNC should set this to 0 and the Node B shall ignore it.
    { ID id-NCyclesPerSFNperiod
                                           CRITICALITY
                                                           reject
                                                                        TYPE
                                                                               NCyclesPerSFNperiod
                                                                                                                               PRESENCE
    mandatory }
                                                                               NRepetitionsPerCyclePeriod PRESENCE
           id-NRepetitionsPerCyclePeriod CRITICALITY
                                                            reject
                                                                                                                        mandatory
           id-CellSyncBurstTransReconfInfo-CellSyncReconfRgstTDD
    { ID
                                                                        CRITICALITY
                                                                                       reject
    CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD
                                                           PRESENCE
                                                                        optional
                                                                                   } -- Applicable to 3.84Mcps TDD only
          id-CellSyncBurstMeasReconfiguration-CellSyncReconfRgstTDD
                                                                            CRITICALITY
                                                                                           reject
    CellSyncBurstMeasInfo-CellSyncReconfRgstTDD
                                                   PRESENCE
                                                              optional
                                                                           }, -- Applicable to 3.84Mcps TDD only
    . . .
CellSynchronisationReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD
                                                                        CRITICALITY reject EXTENSION
                                                                                                                   NSubCyclesPerCyclePeriod
                                   PRESENCE optional } -- Applicable to 1.28Mcps TDD only
    { ID id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRgstTDD
                                                                           CRITICALITY reject EXTENSION
                                                                                                                   SYNCDlCodeIdTransReconfInfoLCR-
                               PRESENCE optional }|
                                                      -- Applicable to 1.28Mcps TDD only
CellSvncReconfRastTDD
    { ID id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD
                                                                           CRITICALITY reject EXTENSION
                                                                                                                   SYNCDlCodeIdMeasInfoLCR-
CellSyncReconfRqstTDD
                           PRESENCE optional }, -- Applicable to 1.28Mcps TDD only
CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstTransInfoItem-
CellSyncReconfRqstTDD
CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
                                               CSBTransmissionID,
    cSBTransmissionID
    svncFrameNumberToTransmit
                                               SyncFrameNumber,
    cellSyncBurstCode
                                               CellSyncBurstCode
                                                                           OPTIONAL,
    cellSyncBurstCodeShift
                                               CellSyncBurstCodeShift
                                                                           OPTIONAL,
    dlTransPower
                                               DL-Power
                                                                           OPTIONAL,
    iE-Extensions
                                               ProtocolExtensionContainer { { CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
    OPTIONAL,
CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstMeasInfo-CellSyncReconfRqstTDD ::= SEQUENCE {
    cellSyncBurstMeasInfoList-CellSyncReconfRgstTDD
                                                        CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
    synchronisationReportType
                                                        SynchronisationReportTypeIE
                                                                                               OPTIONAL,
    synchronisationReportCharacteristics
                                                        SynchronisationReportCharacteristicsIE OPTIONAL,
    iE-Extensions
                                                        ProtocolExtensionContainer { { CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs} }
    OPTIONAL,
```

```
CellSyncBurstMeasInfo-CellSyncReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD ::= ProtocolIE-Single-Container {{ CellSyncBurstMeasInfoListIEs-CellSyncReconfRqstTDD }}
CellSyncBurstMeasInfoListIEs-CellSyncReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    TYPE CellSyncBurstMeasInfoListIE-CellSyncReconfRqstTDD
    PRESENCE mandatory }
SynchronisationReportTypeIE ::= ProtocolIE-Single-Container {{ SynchronisationReportTypeIEs }}
SynchronisationReportTypeIEs NBAP-PROTOCOL-IES ::= {
    { ID id-SynchronisationReportType
                                                      CRITICALITY reject TYPE SynchronisationReportType
       PRESENCE mandatory }
SynchronisationReportCharacteristicsIE ::= ProtocolIE-Single-Container {{ SynchronisationReportCharacteristicsIEs }}
SynchronisationReportCharacteristicsIEs NBAP-PROTOCOL-IES ::= {
    { ID id-SynchronisationReportCharacteristics
                                                     CRITICALITY reject TYPE SynchronisationReportCharacteristics
                                                                                                                                  PRESENCE
   mandatory }
CellSyncBurstMeasInfoListIE-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-
CellSyncReconfRqstTDD
CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
    syncFrameNrToReceive
                                          SyncFrameNumber,
    svncBurstInfo
                                          CellSyncBurstInfoList-CellSyncReconfRqstTDD,
                                          ProtocolExtensionContainer { CellSyncBurstMeasInfoItem-CellSyncReconfRgstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstInfoList-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfoItem-CellSyncReconfRqstTDD
CellSyncBurstInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
    cSBMeasurementID
                                              CSBMeasurementID,
    cellSyncBurstCode
                                              CellSyncBurstCode,
    cellSyncBurstCodeShift
                                              CellSyncBurstCodeShift,
                                              ProtocolExtensionContainer { { CellSyncBurstInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
```

```
CellSyncBurstInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRgstTDD ::= SEOUENCE (SIZE (1..maxNrOfSyncFramesLCR)) OF SYNCDlCodeIdTransReconfItemLCR-
CellSyncReconfRqstTDD
SYNCDlCodeIdTransReconfItemLCR-CellSyncReconfRqstTDD ::= SEQUENCE {
    cSBTransmissionID
                                                CSBTransmissionID,
    syncFrameNumberforTransmit
                                                SyncFrameNumber,
    uARFCN
                                                UARFCN,
                                                SYNCDlCodeId
                                                                OPTIONAL,
    sYNCD1CodeId
    dwPCH-Power
                                                DwPCH-Power
                                                                OPTIONAL,
                                                ProtocolExtensionContainer { { SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRgstTDD-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
{\tt SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD-ExtIEs} \ \ {\tt NBAP-PROTOCOL-EXTENSION} \ ::= \ \{ \tt NBAP-PROTOCOL-EXTENSION ::= \} 
SYNCDlCodeIdMeasInfoLCR-CellSyncReconfRqstTDD::= SEQUENCE {
    sYNCDlCodeIdMeasInfoList
                                                SYNCDlCodeIdMeasInfoList-CellSyncReconfRgstTDD,
    synchronisationReportType
                                                SynchronisationReportType
                                                                                                OPTIONAL,
                                                SynchronisationReportCharacteristics
    synchronisationReportCharacteristics
                                                                                            OPTIONAL,
                                                    iE-Extensions
                       ProtocolExtensionContainer
    . . .
SYNCDlCodeIdMeasInfoLCR-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeIdMeasInfoList-CellSyncReconfRgstTDD::= SEOUENCE (SIZE (1.. maxNrOfSyncDLCodesLCR)) OF SYNCDlCodeIdMeasInfoItem-CellSyncReconfRgstTDD
SYNCDlCodeIdMeasInfoItem-CellSyncReconfRgstTDD ::= SEQUENCE {
    syncFrameNrToReceive
                                            SyncFrameNumber,
    sYNCDlCodeIdInfoLCR
                                            SYNCDlCodeIdInfoListLCR-CellSyncReconfRqstTDD,
                                            ProtocolExtensionContainer { { SYNCDlCodeIdMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
SYNCDlCodeIdMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeIdInfoListLCR-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfReceptionsperSyncFrameLCR)) OF SYNCDlCodeIdInfoItemLCR-
CellSyncReconfRqstTDD
```

925

```
SYNCDlCodeIdInfoItemLCR-CellSyncReconfRqstTDD ::= SEQUENCE {
   cSBMeasurementID
                                            CSBMeasurementID,
   sYNCDlCodeId
                                            SYNCDlCodeId.
   uARFCN
                                            UARFCN,
   propagationDelayCompensation
                                            TimingAdjustmentValueLCR
                                                                          OPTIONAL.
                                            ProtocolExtensionContainer { { SYNCDlCodeIdInfoItemLCR-CellSyncReconfRgstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
SYNCDlCodeIdInfoItemLCR-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ****************
  CELL SYNCHRONISATION RECONFIGURATION RESPONSE TDD
  CellSynchronisationReconfigurationResponseTDD ::= SEQUENCE {
                         ProtocolIE-Container
                                                    {{CellSynchronisationReconfigurationResponseTDD-IEs}},
   protocolIEs
                                                  {{CellSynchronisationReconfigurationResponseTDD-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                                OPTIONAL,
   . . .
CellSynchronisationReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationReconfigurationResponseTDD-IEs NBAP-PROTOCOL-IES ::=
    { ID
         id-CriticalityDiagnostics
                                                   CRITICALITY
                                                                             TYPE
                                                                                     CriticalityDiagnostics
                                                                                                                      PRESENCE
                                                                  ignore
   optional
   . . .
  CELL SYNCHRONISATION RECONFIGURATION FAILURE TDD
__ ********************
CellSynchronisationReconfigurationFailureTDD ::= SEQUENCE
                                                    {{CellSynchronisationReconfigurationFailureTDD-IEs}},
   protocolIEs
                         ProtocolIE-Container
                                                  {{CellSynchronisationReconfigurationFailureTDD-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                               OPTIONAL,
CellSynchronisationReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationReconfigurationFailureTDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-Cause
                                        CRITICALITY ignore
                                                              TYPE Cause
                                                                                                           PRESENCE mandatory } |
```

```
{ ID id-CriticalityDiagnostics
                                        CRITICALITY ignore
                                                              TYPE CriticalityDiagnostics
                                                                                                          PRESENCE optional },
-- CELL SYNCHRONISATION ADJUSTMENT REQUEST TDD
CellSynchronisationAdjustmentRequestTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                   {{CellSynchronisationAdjustmentRequestTDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer
                                                  {{CellSynchronisationAdjustmentRequestTDD-Extensions}}
                                                                                                          OPTIONAL,
CellSynchronisationAdjustmentRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationAdjustmentRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CellAdjustmentInfo-SyncAdjustmntRqstTDD CRITICALITY iqnore TYPE CellAdjustmentInfo-SyncAdjustmentRqstTDD
                                                                                                                     PRESENCE mandatory
    . . .
CellAdjustmentInfo-SyncAdjustmentRgstTDD::= SEOUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ CellAdjustmentInfoItemIE-
SyncAdjustmntRgstTDD }}
CellAdjustmentInfoItemIE-SyncAdjustmntRqstTDD NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
CellAdjustmentInfoItem-SyncAdjustmentRqstTDD ::= SEQUENCE
   c-ID
                                        C-ID,
   frameAdjustmentValue
                                        FrameAdjustmentValue
                                                                  OPTIONAL,
   timingAdjustmentValue
                                        TimingAdjustmentValue
                                                                  OPTIONAL,
   dLTransPower
                                        DL-Power
                                                                  OPTIONAL, -- Applicable to 3.84Mcps TDD only
   sfn
                                                                  OPTIONAL,
   iE-Extensions
                                        ProtocolExtensionContainer { { CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs} }
   OPTIONAL,
   . . .
CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-DwPCH-Power
                                    CRITICALITY ignore EXTENSION DwPCH-Power
                                                                                        PRESENCE optional }
   -- Applicable to 1.28Mcps TDD only
   { ID id-TimingAdjustmentValueLCR
                                    CRITICALITY ignore EXTENSION TimingAdjustmentValueLCR PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only
__ ***********************
```

```
CELL SYNCHRONISATION ADJUSTMENT RESPONSE TDD
__ ********************************
CellSynchronisationAdjustmentResponseTDD ::= SEQUENCE {
                                                    {{CellSynchronisationAdjustmentResponseTDD-IEs}},
   protocolIEs
                         ProtocolIE-Container
   protocolExtensions
                         ProtocolExtensionContainer {{CellSynchronisationAdjustmentResponseTDD-Extensions}}
                                                                                                           OPTIONAL.
CellSynchronisationAdjustmentResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationAdjustmentResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CriticalityDiagnostics
                                                                             CriticalityDiagnostics
                                            CRITICALITY
                                                                      TYPE
   PRESENCE
              optional },
    CELL SYNCHRONISATION ADJUSTMENT FAILURE TDD
    ****************
CellSynchronisationAdjustmentFailureTDD ::= SEQUENCE {
                                                    {{CellSynchronisationAdjustmentFailureTDD-IEs}},
   protocolIEs
                         ProtocolIE-Container
                         ProtocolExtensionContainer
                                                   {{CellSynchronisationAdjustmentFailureTDD-Extensions}}
   protocolExtensions
                                                                                                          OPTIONAL,
   . . .
CellSynchronisationAdjustmentFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationAdjustmentFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CauseLevel-SyncAdjustmntFailureTDD CRITICALITY ignore
                                                                      TYPE
                                                                             CauseLevel-SyncAdjustmntFailureTDD
                                                                                                                     PRESENCE
   mandatory } |
          id-CriticalityDiagnostics
                                                                      TYPE
   { ID
                                                CRITICALITY ignore
                                                                             CriticalityDiagnostics
                                                                                                                     PRESENCE
   optional },
   . . .
CauseLevel-SyncAdjustmntFailureTDD ::= CHOICE {
   generalCause
                         GeneralCauseList-SyncAdjustmntFailureTDD,
                         CellSpecificCauseList-SyncAdjustmntFailureTDD,
   cellSpecificCause
GeneralCauseList-SyncAdjustmntFailureTDD::= SEQUENCE {
   cause
                                            Cause,
```

```
ProtocolExtensionContainer { GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL.
GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSpecificCauseList-SyncAdjustmntFailureTDD ::= SEQUENCE {
   unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD
                                                                      Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD,
   iE-Extensions
                                              ProtocolExtensionContainer { { CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs} }
   OPTIONAL,
CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD ::= SEQUENCE (SIZE (1..maxCellinNodeB))
                                                                                                                OF ProtocolIE-Single-Container
{{ Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD }}
Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD NBAP-PROTOCOL-IES ::= {
          id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD
                                                                                  CRITICALITY
                                                                                                                ignore
                                                                                                                                   TYPE
   Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD
                                                                                 mandatory },
                                                                      PRESENCE
    . . .
Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD::= SEQUENCE {
   c-ID
                                              C-ID,
   cause
                                              Cause,
    iE-Extensions
                                              ProtocolExtensionContainer { { Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-
               OPTIONAL,
ExtIEs } }
Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
   *******************
-- CELL SYNCHRONISATION TERMINATION REQUEST TDD
__ ********************************
CellSynchronisationTerminationRequestTDD ::= SEQUENCE {
   protocolIEs
                           ProtocolIE-Container
                                                      {{CellSynchronisationTerminationRequestTDD-IEs}},
   protocolExtensions
                           ProtocolExtensionContainer {{CellSynchronisationTerminationRequestTDD-Extensions}}
                                                                                                                OPTIONAL,
CellSynchronisationTerminationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
CellSynchronisationTerminationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-C-ID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                        C-ID
                                                                                                                          PRESENCE
   mandatory }|
   { ID
         id-CSBTransmissionID
                                                                        CSBTransmissionID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                                                                          PRESENCE
   optional
                } |
   { ID
        id-CSBMeasurementID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                        CSBMeasurement ID
                                                                                                                          PRESENCE
   optional
  CELL SYNCHRONISATION FAILURE INDICATION TDD
__ ********************
CellSynchronisationFailureIndicationTDD ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                   {{CellSynchronisationFailureIndicationTDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{CellSynchronisationFailureIndicationTDD-Extensions}}
                                                                                                        OPTIONAL,
CellSynchronisationFailureIndicationTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationFailureIndicationTDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-C-ID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                        C-ID
                                                                                                                          PRESENCE
   mandatory } |
   { ID
          id-CSBTransmissionID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                        CSBTransmissionID
                                                                                                                          PRESENCE
   optional
        id-CSBMeasurementID
   { ID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                        CSBMeasurement ID
                                                                                                                          PRESENCE
   optional
         id-Cause
   { ID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                        Cause
                                                                                                                          PRESENCE
   mandatory },
   -- CELL SYNCHRONISATION REPORT TDD
__ *********************
CellSynchronisationReportTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                   {{CellSynchronisationReportTDD-IEs}},
                         ProtocolExtensionContainer {{CellSynchronisationReportTDD-Extensions}}
   protocolExtensions
                                                                                              OPTIONAL,
CellSynchronisationReportTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
CellSynchronisationReportTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CellSyncInfo-CellSyncReprtTDD
                                                CRITICALITY ignore
                                                                        TYPE CellSyncInfo-CellSyncReprtTDD
                                                                                                                                PRESENCE mandatory
CellSyncInfo-CellSyncReprtTDD ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF CellSyncInfoItemIE-CellSyncReprtTDD
CellSyncInfoItemIE-CellSyncReprtTDD ::= SEQUENCE {
    c-ID-CellSyncReprtTDD
                                        C-ID-IE-CellSyncReprtTDD,
    syncReportType-CellSyncReprtTDD
                                        SyncReportTypeIE-CellSyncReprtTDD
                                                                                OPTIONAL.
C-ID-IE-CellSyncReprtTDD ::= ProtocolIE-Single-Container {{ C-ID-IEs-CellSyncReprtTDD }}
C-ID-IEs-CellSyncReprtTDD NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID
                                        CRITICALITY ignore
                                                                    TYPE C-ID
                                                                                                PRESENCE mandatory }
SyncReportTypeIE-CellSyncReprtTDD::= ProtocolIE-Single-Container {{ SyncReportTypeIEs-CellSyncReprtTDD }}
SyncReportTypeIEs-CellSyncReprtTDD NBAP-PROTOCOL-IES ::= {
           id-SyncReportType-CellSyncReprtTDD
                                                    CRITICALITY ignore
                                                                            TYPE SyncReportType-CellSyncReprtTDD
    { ID
                                                                                                                         PRESENCE
                                                                                                                                        mandatory}
SyncReportType-CellSyncReprtTDD ::= CHOICE {
    intStdPhSyncInfo-CellSyncReprtTDD
                                            IntStdPhCellSyncInfo-CellSyncReprtTDD,
    lateEntrantCell
                                            NULL,
                                            NULL,
    frequencyAcquisition
    . . .
IntStdPhCellSyncInfo-CellSyncReprtTDD ::= SEQUENCE
    cellSyncBurstMeasuredInfo
                                                CellSyncBurstMeasInfoList-CellSyncReprtTDD,
    iE-Extensions
                                                ProtocolExtensionContainer { { IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs} }
    OPTIONAL,
    . . .
IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-AccumulatedClockupdate-CellSyncReprtTDD
                                                      CRITICALITY ignore EXTENSION TimingAdjustmentValue
                                                                                                                    PRESENCE
                                                                                                                                optional
     ID id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD CRITICALITY ignore EXTENSION
                                                                                        SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD
optional }, -- Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.
CellSyncBurstMeasInfoList-CellSyncReprtTDD ::= SEQUENCE (SIZE (0.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReprtTDD --
Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.
```

```
CellSyncBurstMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstInfo-CellSyncReprtTDD
                                            SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfo-CellSyncReprtTDD,
    iE-Extensions
                                            ProtocolExtensionContainer { { CellSyncBurstMeasInfoItem-CellSyncReprtTDD-ExtIEs} }
                                                                                                                                         OPTIONAL,
CellSyncBurstMeasInfoItem-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstInfo-CellSyncReprtTDD ::= CHOICE {
    cellSyncBurstAvailable
                                CellSyncBurstAvailable-CellSyncReprtTDD,
    cellSyncBurstNotAvailable NULL,
CellSyncBurstAvailable-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstTiming
                                CellSyncBurstTiming,
    cellSyncBurstSIR
                                CellSyncBurstSIR,
    iE-Extensions
                                ProtocolExtensionContainer { { CellSyncBurstAvailable-CellSyncReprtTDD-ExtIEs} }
                                                                                                                         OPTIONAL,
    . . .
CellSyncBurstAvailable-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD ::= SEOUENCE (SIZE (0..maxNrOfSyncFramesLCR)) OF SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD
-- Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.
SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
                                            SFN.
    syncDLCodeIdInfo-CellSyncReprtTDD
                                            SyncDLCodeIdInfo-CellSyncReprtTDD,
    iE-Extensions
                                            ProtocolExtensionContainer { { SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD-ExtIEs } }
    OPTIONAL,
SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SyncDLCodeIdInfo-CellSyncReprtTDD ::= SEQUENCE (SIZE (1..maxNrOfReceptionsperSyncFrameLCR)) OF SyncDLCodeIdItem-CellSyncReprtTDD
SyncDLCodeIdItem-CellSyncReprtTDD ::= CHOICE
    svncDLCodeIdAvailable
                                        SyncDLCodeIdAvailable-CellSyncReprtTDD,
    syncDLCodeIDNotAvailable
                                        NULL,
SyncDLCodeIdAvailable-CellSyncReprtTDD ::= SEQUENCE {
    syncDLCodeIdTiming
                                CellSyncBurstTimingLCR,
                                CellSyncBurstSIR,
    syncDLCodeIdSIR
```

```
OPTIONAL,
   iE-Extensions
SyncDLCodeIdAvailable-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- BEARER REARRANGEMENT INDICATION
__ **********************
BearerRearrangementIndication ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                          {BearerRearrangementIndication-IEs}},
                                ProtocolExtensionContainer {{BearerRearrangementIndication-Extensions}}
   protocolExtensions
                                                                                                                  OPTIONAL,
BearerRearrangementIndication-IES NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
                                                  CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                          PRESENCE
mandatory } |
   { ID id-SignallingBearerRequestIndicator
                                                   CRITICALITY ignore TYPE SignallingBearerRequestIndicator
                                                                                                                          PRESENCE
optional } |
   { ID id-DCH-RearrangeList-Bearer-RearrangeInd
                                                  CRITICALITY ignore TYPE DCH-RearrangeList-Bearer-RearrangeInd
                                                                                                                          PRESENCE
   optional }
     ID id-DSCH-RearrangeList-Bearer-RearrangeInd
                                                  CRITICALITY ignore TYPE DSCH-RearrangeList-Bearer-RearrangeInd
                                                                                                                   PRESENCE optional }
   -- TDD only.
     ID id-USCH-RearrangeList-Bearer-RearrangeInd
                                                   CRITICALITY ignore TYPE USCH-RearrangeList-Bearer-RearrangeInd
                                                                                                                   PRESENCE optional }
   -- TDD only.
   { ID id-HSDSCH-RearrangeList-Bearer-RearrangeInd
                                                  CRITICALITY ignore TYPE HSDSCH-RearrangeList-Bearer-RearrangeInd
                                                                                                                          PRESENCE
optional },
   . . .
BearerRearrangementIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-E-DCH-RearrangeList-Bearer-RearrangeInd
                                                  CRITICALITY ignore EXTENSION E-DCH-RearrangeList-Bearer-RearrangeInd PRESENCE optional },
   . . .
DCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-RearrangeItem-Bearer-RearrangeInd
DCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE
   dCH-ID
                                               DCH-ID.
   iE-Extensions
                                               OPTIONAL,
   . . .
DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DSCH-RearrangeList-Bearer-RearrangeInd ::= SEOUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-RearrangeItem-Bearer-RearrangeInd
DSCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
   dscH-ID
                                               DSCH-ID,
                                               iE-Extensions
   OPTIONAL,
DSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
USCH-RearrangeList-Bearer-RearrangeInd ::= SEOUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-RearrangeItem-Bearer-RearrangeInd
USCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
   uSCH-ID
                                               USCH-ID,
                                               iE-Extensions
   OPTIONAL,
   . . .
USCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-RearrangeList-Bearer-RearrangeInd ::= SEOUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-RearrangeItem-Bearer-RearrangeInd
HSDSCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
   hsDSCH-MACdFlow-ID
                                               HSDSCH-MACdFlow-ID,
   iE-Extensions
                                               ProtocolExtensionContainer { { HSDSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs} }
   OPTIONAL,
   . . .
HSDSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlows)) OF E-DCH-RearrangeItem-Bearer-RearrangeInd
E-DCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
   e-DCH-MACdFlow-ID
                                               E-DCH-MACdFlow-ID,
   iE-Extensions
                                               ProtocolExtensionContainer { { E-DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs} }
   OPTIONAL,
E-DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
__ *********************
-- RADIO LINK ACTIVATION COMMAND FDD
      *****************
RadioLinkActivationCommandFDD ::= SEQUENCE {
   protocolIEs
                  ProtocolIE-Container
                                                    {{RadioLinkActivationCommandFDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer
                                                   {{RadioLinkActivationCommandFDD-Extensions}}
                                                                                                                     OPTIONAL,
RadioLinkActivationCommandFDD-IEs NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                                           CRITICALITY ignore TYPE
                                                                                    NodeB-CommunicationContextID
                  PRESENCE
                           mandatory }|
          id-DelayedActivationList-RL-ActivationCmdFDD
    ID
                                                           CRITICALITY ignore TYPE
                                                                                    DelayedActivationInformationList-RL-ActivationCmdFDD
          PRESENCE mandatory },
RadioLinkActivationCommandFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
DelayedActivationInformationList-RL-ActivationCmdFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
    { DelayedActivationInformation-RL-ActivationCmdFDD-IEs} }
DelayedActivationInformation-RL-ActivationCmdFDD-IES NBAP-PROTOCOL-IES ::= {
     ID id-DelayedActivationInformation-RL-ActivationCmdFDD CRITICALITY ignore TYPE DelayedActivationInformation-RL-ActivationCmdFDD
   PRESENCE optional
DelayedActivationInformation-RL-ActivationCmdFDD ::= SEQUENCE {
                             RL-ID,
   delayed-activation-update DelayedActivationUpdate,
                             ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK ACTIVATION COMMAND TDD
__ **********************
RadioLinkActivationCommandTDD ::= SEQUENCE {
                                                    {{RadioLinkActivationCommandTDD-IEs}},
   protocolIEs
                    ProtocolIE-Container
   protocolExtensions
                      ProtocolExtensionContainer
                                                   {{RadioLinkActivationCommandTDD-Extensions}}
                                                                                                                     OPTIONAL,
```

```
RadioLinkActivationCommandTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                                              CRITICALITY ignore TYPE
                                                                                         NodeB-CommunicationContextID
                   PRESENCE mandatory } |
           id-DelayedActivationList-RL-ActivationCmdTDD
                                                              CRITICALITY ignore TYPE
                                                                                         DelayedActivationInformationList-RL-ActivationCmdTDD
           PRESENCE
                     mandatory },
RadioLinkActivationCommandTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
DelayedActivationInformationList-RL-ActivationCmdTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container
     DelayedActivationInformation-RL-ActivationCmdTDD-IEs} }
DelayedActivationInformation-RL-ActivationCmdTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-DelayedActivationInformation-RL-ActivationCmdTDD CRITICALITY ignore TYPE DelayedActivationInformation-RL-ActivationCmdTDD
    PRESENCE optional
DelayedActivationInformation-RL-ActivationCmdTDD ::= SEQUENCE {
    delayed-activation-update
                              DelayedActivationUpdate,
   iE-Extensions
                               ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs} } OPTIONAL,
DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     *******************
-- RADIO LINK PARAMETER UPDATE INDICATION FDD
RadioLinkParameterUpdateIndicationFDD ::= SEQUENCE
   protocolIEs
                           ProtocolIE-Container
                                                       {{RadioLinkParameterUpdateIndicationFDD-IEs}},
                                                     {{RadioLinkParameterUpdateIndicationFDD-Extensions}}
   protocolExtensions
                           ProtocolExtensionContainer
                                                                                                                     OPTIONAL,
RadioLinkParameterUpdateIndicationFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
                                              CRITICALITY
                                                                          TYPE
                                                                                  CRNC-CommunicationContextID
                                                                                                                            PRESENCE
                                                              ignore
   mandatory } |
    { ID id-HSDSCH-FDD-Update-Information
                                              CRITICALITY
                                                              ignore
                                                                          TYPE
                                                                                 HSDSCH-FDD-Update-Information
                                                                                                                            PRESENCE
   optional },
    . . .
RadioLinkParameterUpdateIndicationFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-E-DCH-FDD-Update-Information
                                          CRITICALITY
                                                                  EXTENSION E-DCH-FDD-Update-Information
                                                        ignore
                                                                                                                      PRESENCE
   optional
   { ID id-Additional-HS-Cell-Information-RL-Param-Upd CRITICALITY ignore
                                                                      EXTENSION Additional-HS-Cell-Information-RL-Param-Upd
   PRESENCE optional },
Additional-HS-Cell-Information-RL-Param-Upd ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Param-Upd-ItemIEs
Additional-HS-Cell-Information-RL-Param-Upd-ItemIEs ::=SEQUENCE{
   hSPDSCH-RL-ID
   hS-DSCH-FDD-Secondary-Serving-Update-Information
                                                HS-DSCH-FDD-Secondary-Serving-Update-Information,
                               ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Setup-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
Additional-HS-Cell-Information-RL-Setup-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ******************
-- RADIO LINK PARAMETER UPDATE INDICATION TDD
__ *********************
RadioLinkParameterUpdateIndicationTDD ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                  {RadioLinkParameterUpdateIndicationTDD-IEs}},
                                                {{RadioLinkParameterUpdateIndicationTDD-Extensions}}
   protocolExtensions
                        ProtocolExtensionContainer
                                                                                                         OPTIONAL,
RadioLinkParameterUpdateIndicationTDD-IEs NBAP-PROTOCOL-IES ::=
   { ID id-CRNC-CommunicationContextID
                                                                  TYPE
                                                                         CRNC-CommunicationContextID
                                                                                                               PRESENCE
                                         CRITICALITY
                                                        ignore
   mandatory }
   { ID id-HSDSCH-TDD-Update-Information
                                         CRITICALITY
                                                        ignore
                                                                  TYPE
                                                                         HSDSCH-TDD-Update-Information
                                                                                                               PRESENCE
   optional
             },
   . . .
RadioLinkParameterUpdateIndicationTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    MBMS NOTIFICATION UPDATE COMMAND
  ************************
MBMSNotificationUpdateCommand ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{ MBMSNotificationUpdateCommand-IEs}},
   protocolExtensions
                        OPTIONAL,
   . . .
```

PRESENCE mandatory

PRESENCE mandatory

PRESENCE optional

PRESENCE mandatory

PRESENCE mandatory

```
MBMSNotificationUpdateCommand-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                           CRITICALITY ignore TYPE C-ID
     ID id-CommonPhysicalChannelID
                                           CRITICALITY ignore TYPE CommonPhysicalChannelID
     ID id-Modification-Period
                                           CRITICALITY ignore TYPE Modification-Period
     ID id-MICH-CFN
                                           CRITICALITY ignore TYPE MICH-CFN
     ID id-NI-Information-NotifUpdateCmd
                                           CRITICALITY ignore TYPE NI-Information
MBMSNotificationUpdateCommand-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- UE STATUS UPDATE COMMAND
    ************
UEStatusUpdateCommand ::= SEQUENCE {
                                               {{UEStatusUpdateCommand-IEs}},
   protocolIEs
                   ProtocolIE-Container
   protocolExtensions ProtocolExtensionContainer {{UEStatusUpdateCommand-Extensions}}
                                                                                   OPTIONAL,
UEStatusUpdateCommand-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-Cell-ERNTI-Status-Information
                                                      CRITICALITY ignore TYPE Cell-ERNTI-Status-Information
       PRESENCE mandatory },
UEStatusUpdateCommand-Extensions NBAP-PROTOCOL-EXTENSION ::= {
END
```

## 9.3.4 Information Elements Definitions

```
NBAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-IEs (2) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
IMPORTS
    maxNrOfRLs.
    maxNrOfTFCs,
    maxNrOfErrors,
    maxCTFC,
    maxNrOfTFs,
    maxTTI-count,
    maxRateMatching,
    maxHS-PDSCHCodeNrComp-1,
    maxHS-SCCHCodeNrComp-1,
    maxNrOfCellSyncBursts,
    maxNrOfCombEDPDCH,
    maxNrOfEDCH-HARQ-PO-QUANTSTEPs,
    maxNrOfEDCHHAROProcesses2msEDCH,
    maxNrOfBits-MACe-PDU-non-scheduled,
    maxNrOfEDPCCH-PO-QUANTSTEPs,
    maxNrOfRefETFCI-PO-QUANTSTEPs,
    maxNrOfRefETFCIs,
    maxNrOfMeasNCell,
    maxNrOfMeasNCell-1,
    maxNrOfReceptsPerSyncFrame,
    maxNrOfSF,
    maxTGPS,
    maxNrOfUSCHs,
    maxNrOfULTSs,
    maxNrOfULTSLCRs,
    maxNrOfDPCHs,
    maxNrOfDPCHLCRs,
    maxNrOfDPCHs768,
    maxNrOfCodes,
    maxNrOfDSCHs.
    maxNrOfDLTSs.
    maxNrOfDLTSLCRs,
    maxNrOfDCHs.
    maxNrOfLevels,
    maxNoGPSItems,
    maxNoSat,
    maxNrOfCellPortionsPerCell,
    maxNrOfCellPortionsPerCell-1,
    maxNrOfHSSCCHs,
    maxNrOfHSSCCHCodes.
    maxNrOfMACdFlows,
    maxNrOfMACdFlows-1,
    maxNrOfMACdPDUIndexes,
    maxNrOfMACdPDUIndexes-1,
    maxNrOfMACdPDUSize,
    maxNrOfNIs,
```

```
maxNrOfPriorityQueues,
maxNrOfPriorityQueues-1,
maxNrOfHAROProcesses,
maxNrOfSyncDLCodesLCR,
maxNrOfSvncFramesLCR,
maxNrOfContextsOnUeList,
maxNrOfPriorityClasses,
maxNrOfSatAlmanac-maxNoSat,
maxNrOfE-AGCHs,
maxNrOfEDCHMACdFlows,
maxNrOfEDCHMACdFlows-1,
maxNrOfE-RGCHs-E-HICHs,
maxNrofSigSegRGHI-1,
maxNoOfLogicalChannels,
maxNrOfEAGCHs.
maxNrOfRefBetas,
maxNrOfEAGCHCodes.
maxNrOfHS-DSCH-TBSs.
maxNrOfHS-DSCH-TBSs-HS-SCCHless,
maxNrOfEHICHCodes.
maxNrOfCommonMACFlows,
maxNrOfCommonMACFlows-1,
maxNrOfPagingMACFlow,
maxNrOfPagingMACFlow-1,
maxNrOfcommonMACQueues,
maxNrOfpagingMACQueues,
maxNrOfHS-DSCHTBSsE-PCH.
maxGANSSSat,
maxNoGANSS,
maxSgnType,
maxHSDPAFrequency,
maxHSDPAFrequency-1,
maxGANSSSatAlmanac,
maxGANSSClockMod,
maxNrOfEDCHRLs,
maxCellinNodeB,
maxERNTItoRelease,
maxNrOfCommonEDCH,
maxFrequencyinCell-1,
maxNrOfCommonMACFlowsLCR,
maxNrOfCommonMACFlowsLCR-1,
maxNrOfHSSCCHsLCR,
maxNrOfEDCHMACdFlowsLCR,
maxNrOfEDCHMACdFlowsLCR-1,
maxNrOfEAGCHsLCR,
maxNrOfEHICHsLCR,
maxnrofERUCCHsLCR,
maxNrOfHSPDSCHs,
maxFrequencyinCell,
maxNrOfHSDSCH-1,
maxNrOfHSDSCH,
maxGANSS-1.
maxNoOfTBSs-Mapping-HS-DSCH-SPS,
maxNoOfTBSs-Mapping-HS-DSCH-SPS-1,
```

```
maxNoOfHS-DSCH-TBSsLCR,
maxNoOfRepetition-Period-LCR,
maxNoOfRepetitionPeriod-SPS-LCR-1.
maxNoOf-HS-SICH-SPS.
maxNoOf-HS-SICH-SPS-1.
maxNoOfNon-HS-SCCH-Assosiated-HS-SICH,
maxNoOfNon-HS-SCCH-Assosiated-HS-SICH-Ext,
maxMBMSServiceSelect,
maxNoOfCommonH-RNTI,
maxNrOfCommonMACFlowsLCRExt,
maxofERNTI.
id-BroadcastCommonTransportBearerIndication,
id-MessageStructure,
id-ReportCharacteristicsType-OnModification,
id-Rx-Timing-Deviation-Value-LCR,
id-SFNSFNMeasurementValueInformation,
id-SFNSFNMeasurementThresholdInformation,
id-TUTRANGPSMeasurementValueInformation,
id-TUTRANGPSMeasurementThresholdInformation,
id-TypeOfError,
id-transportlayeraddress,
id-bindingID,
id-Angle-Of-Arrival-Value-LCR,
id-SvncDLCodeIdThreInfoLCR,
id-neighbouringTDDCellMeasurementInformationLCR,
id-HS-SICH-Reception-Quality,
id-HS-SICH-Reception-Ouality-Measurement-Value,
id-Initial-DL-Power-TimeslotLCR-InformationItem,
id-Maximum-DL-Power-TimeslotLCR-InformationItem,
id-Minimum-DL-Power-TimeslotLCR-InformationItem,
id-Received-total-wide-band-power-For-CellPortion,
id-Received-total-wide-band-power-For-CellPortion-Value,
id-Transmitted-Carrier-Power-For-CellPortion,
id-Transmitted-Carrier-Power-For-CellPortion-Value,
id-TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmission,
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortion,
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValue,
id-HS-DSCHRequiredPowerValueInformation,
id-HS-DSCHProvidedBitRateValueInformation,
id-HS-DSCHRequiredPowerValue,
id-HS-DSCHRequiredPowerValue-For-Cell-Portion,
id-HS-DSCHRequiredPowerValueInformation-For-CellPortion,
id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion,
id-HSDSCH-MACdPDUSizeFormat,
id-HS-PDSCH-Code-Change-Grant,
id-HS-PDSCH-Code-Change-Indicator,
id-HS-DSCH-SPS-Operation-Indicator,
id-Best-Cell-Portions-Value,
id-Unidirectional-DCH-Indicator,
id-SAT-Info-Almanac-ExtItem,
id-TnlOos,
id-UpPTSInterferenceValue,
id-HARO-Preamble-Mode,
id-HARO-Preamble-Mode-Activation-Indicator,
id-DLTransmissionBranchLoadValue,
```

```
id-E-DCHProvidedBitRateValueInformation,
id-E-DCH-Non-serving-Relative-Grant-Down-CommandsValue.
id-HSSICH-SIRTarget.
id-PLCCH-Information-UL-TimeslotLCR-Info,
id-neighbouringTDDCellMeasurementInformation768,
id-Rx-Timing-Deviation-Value-768,
id-hsSCCH-Specific-Information-ResponseTDD768,
id-Rx-Timing-Deviation-Value-384-ext,
id-E-DCH-PowerOffset-for-SchedulingInfo,
id-Extended-Round-Trip-Time-Value,
id-ExtendedPropagationDelay,
id-HSSICH-TPC-StepSize,
id-RTWP-CellPortion-ReportingIndicator,
id-Received-Scheduled-EDCH-Power-Share-Value,
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value.
id-Received-Scheduled-EDCH-Power-Share.
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion,
id-ueCapability-Info,
id-ContinuousPacketConnectivityHS-SCCH-less-Information,
id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response,
id-MIMO-ActivationIndicator,
id-MIMO-Mode-Indicator,
id-MIMO-N-M-Ratio,
id-Additional-failed-HS-SICH,
id-Additional-missed-HS-SICH,
id-Additional-total-HS-SICH,
id-Additional-HS-SICH-Reception-Quality-Measurement-Value,
id-LCRTDD-uplink-Physical-Channel-Capability,
id-SixteenOAM-UL-Operation-Indicator,
id-E-AGCH-Table-Choice,
id-E-TFCI-Boost-Information,
id-E-DPDCH-PowerInterpolation,
id-MaximumMACdPDU-SizeExtended,
id-GANSS-Common-Data,
id-GANSS-Information,
id-GANSS-Generic-Data,
id-TUTRANGANSSMeasurementThresholdInformation.
id-TUTRANGANSSMeasurementValueInformation,
id-Extended-RNC-ID,
id-HARO-MemoryPartitioningInfoExtForMIMO,
id-Ext-Reference-E-TFCI-PO,
id-Ext-Max-Bits-MACe-PDU-non-scheduled,
id-TransportBearerNotSetupIndicator,
id-TransportBearerNotRequestedIndicator,
id-UARFCNforNt,
id-number-Of-Supported-Carriers,
id-multipleFreq-HSPDSCH-InformationList-ResponseTDDLCR,
id-tSN-Length,
id-multicarrier-number,
id-Extended-HS-SICH-ID,
id-Default-Serving-Grant-in-DTX-Cycle2,
id-SixtyfourOAM-UsageAllowedIndicator,
id-SixtyfourQAM-DL-UsageIndicator,
id-IPMulticastDataBearerIndication,
```

```
id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory,
id-ContinuousPacketConnectivityHS-SCCH-less-Deactivate-Indicator,
id-Extended-E-HICH-ID-TDD.
id-E-DCH-MACdPDUSizeFormat.
id-MaximumNumber-Of-Retransmission-for-Scheduling-Info-LCRTDD,
id-E-DCH-RetransmissionTimer-for-SchedulingInfo-LCRTDD,
id-E-PUCH-PowerControlGAP.
id-HSDSCH-TBSizeTableIndicator,
id-E-DCH-DL-Control-Channel-Change-Information,
id-E-DCH-DL-Control-Channel-Grant-Information,
id-DGANSS-Corrections-Req,
id-UE-with-enhanced-HS-SCCH-support-indicator,
id-TransportBearerRequestIndicator,
id-EnhancedHSServingCC-Abort.
id-GANSS-Time-ID,
id-GANSS-AddIonoModelReg,
id-GANSS-EarthOrientParaReg,
id-GANSS-AddNavigationModelsReg,
id-GANSS-AddUTCModelsReg,
id-GANSS-AuxInfoReg,
id-GANSS-SBAS-ID,
id-GANSS-ID,
id-GANSS-Additional-Ionospheric-Model,
id-GANSS-Earth-Orientation-Parameters,
id-GANSS-Additional-Time-Models,
id-GANSS-Additional-Navigation-Models,
id-GANSS-Additional-UTC-Models,
id-GANSS-Auxiliary-Information,
id-GANSS-alm-keplerianNAVAlmanac,
id-GANSS-alm-keplerianReducedAlmanac,
id-GANSS-alm-keplerianMidiAlmanac,
id-GANSS-alm-keplerianGLONASS,
id-GANSS-alm-ecefSBASAlmanac,
id-EDCH-RACH-Report-Value,
id-EDCH-RACH-Report-IncrDecrThres,
id-EDCH-RACH-Report-ThresholdInformation,
id-MACes-Maximum-Bitrate-LCR,
id-E-AGCH-UE-Inactivity-Monitor-Threshold,
id-MultiCarrier-HSDSCH-Physical-Layer-Category,
id-MIMO-ReferenceSignal-InformationListLCR,
id-MIMO-SFMode-For-HSPDSCHDualStream,
id-MIMO-SFMode-Supported-For-HSPDSCHDualStream,
id-DL-RLC-PDU-Size-Format,
id-schedulingPriorityIndicator,
id-UE-SupportIndicatorExtension,
id-MultipleFreq-HARQ-MemoryPartitioning-InformationList,
id-HS-DSCH-SPS-Reservation-Indicator,
id-E-DCH-SPS-Reservation-Indicator,
id-Ul-common-E-DCH-MACflow-Specific-InfoResponseListLCR-Ext,
id-RepetitionPeriodIndex,
id-MidambleShiftLCR,
id-DiversityMode,
id-TransmitDiversitvIndicator.
```

```
id-NonCellSpecificTxDiversity,
    id-E-RNTI-List-Request,
    id-E-RNTI-List.
    id-UL-Synchronisation-Parameters-For-FACHLCR,
    id-Add-To-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst-Ext,
    id-Modify-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst-Ext,
    id-AssociatedPhsicalChannelID,
    id-PhysicalChannelID-for-CommonERNTI-RequestedIndicator,
    id-Initial-DL-Transmission-Power,
    id-Maximum-DL-Power,
    id-Minimum-DL-Power,
    id-ContinuousPacketConnectivityDTX-DRX-Information,
    id-Ul-common-E-DCH-MACflow-Specific-InfoListLCR-Ext,
    id-CommonMACFlow-Specific-InfoList-ResponseLCR-Ext,
    id-Enabling-Delay-Ext-LCR,
    id-HS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext
FROM NBAP-Constants
    Criticality,
    ProcedureID,
    ProtocolIE-ID.
   TransactionID,
    TriggeringMessage
FROM NBAP-CommonDataTypes
    NBAP-PROTOCOL-IES,
    ProtocolExtensionContainer{},
    ProtocolIE-Single-Container{},
    NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers:
-- ------
-- ------
AckNack-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
Ack-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [9] subclause 4.2.1
Acknowledged-PRACH-preambles-Value ::= INTEGER(0..240,...)
-- According to mapping in [22].
AdditionalMeasurementValueList::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF AdditionalMeasurementValue
AdditionalMeasurementValue ::= SEQUENCE {
    uARFCN
                                          UARFCN,
    timeSlotMeasurementValueListLCR
                                          TimeSlotMeasurementValueListLCR,
    iE-Extensions
                                          ProtocolExtensionContainer { {AdditionalMeasurementValueList-ExtIEs} } OPTIONAL,
```

```
AdditionalMeasurementValueList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AdditionalTimeSlotListLCR::= SEQUENCE (SIZE (0..maxFrequencyinCell-1)) OF AdditionalTimeSlotLCR
AdditionalTimeSlotLCR ::= SEQUENCE {
    uARFCN
                                        UARFCN,
    timeslot-InitiatedListLCR
                                                TimeSlot-InitiatedListLCR
                                                                              OPTIONAL,
                                                ProtocolExtensionContainer { {AdditionalTimeSlotLCR-ExtIEs} } OPTIONAL,
    iE-Extensions
AdditionalTimeSlotLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AddorDeleteIndicator ::= ENUMERATED {
    add,
    delete
Active-Pattern-Sequence-Information ::= SEQUENCE {
    cMConfigurationChangeCFN
                                                             CFN,
    transmission-Gap-Pattern-Sequence-Status
                                                Transmission-Gap-Pattern-Sequence-Status-List OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
Active-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
    SEQUENCE {
        tGPSID
                        TGPSID,
        tGPRC
                        TGPRC,
        tGCFN
                        CFN.
        iE-Extensions
                            ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
AICH-Power ::= INTEGER (-22..5)
-- Offset in dB.
AICH-TransmissionTiming ::= ENUMERATED {
    νO,
    v1
AllocationRetentionPriority ::= SEQUENCE {
    priorityLevel
                                PriorityLevel,
                               Pre-emptionCapability,
    pre-emptionCapability
    pre-emptionVulnerability Pre-emptionVulnerability,
    iE-Extensions
                                ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
AllocationRetentionPriority-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AlternativeFormatReportingIndicator ::= ENUMERATED {
   alternativeFormatAllowed, ...
Angle-Of-Arrival-Value-LCR ::= SEQUENCE {
                                AOA-LCR,
    aOA-LCR
    aOA-LCR-Accuracy-Class
                               AOA-LCR-Accuracy-Class,
                               ProtocolExtensionContainer { {Angle-Of-Arrival-Value-LCR-ExtIEs} } OPTIONAL,
    iE-Extensions
Angle-Of-Arrival-Value-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AOA-LCR := INTEGER (0..719)
-- Angle Of Arrival for 1.28Mcps TDD
AOA-LCR-Accuracy-Class ::= ENUMERATED {a,b,c,d,e,f,g,h,...}
AvailabilityStatus ::= ENUMERATED {
    empty,
    in-test,
    failed,
    power-off,
    off-line,
    off-duty,
    dependency,
    degraded,
    not-installed,
    log-full,
```

```
__ _______
-- -----
BCCH-Specific-HSDSCH-RNTI-Information::= SEOUENCE {
   bCCH-Specific-HSDSCH-RNTI
                                              HSDSCH-RNTI,
   hSSCCH-Power
                                              DL-Power,
   hSPDSCH-Power
                                              DL-Power,
                                              iE-Extensions
   OPTIONAL,
   . . .
BCCH-Specific-HSDSCH-RNTI-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BCCH-Specific-HSDSCH-RNTI-InformationLCR::= SEQUENCE {
   bCCH-Specific-HSDSCH-RNTI
                                              HSDSCH-RNTI,
   hSSCCH-Power
                                              DL-Power,
   hSPDSCH-Power
                                              DL-Power,
   iE-Extensions
                                              ProtocolExtensionContainer { { BCCH-Specific-HSDSCH-RNTI-InformationLCR-ExtIEs } }
   OPTIONAL,
   . . .
BCCH-Specific-HSDSCH-RNTI-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BCCH-ModificationTime ::= INTEGER (0..511)
-- Time = BCCH-ModificationTime * 8
-- Range 0 to 4088, step 8
-- All SFN values in which MIB may be mapped are allowed
Best-Cell-Portions-Value::= SEOUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Best-Cell-Portions-Item
Best-Cell-Portions-Item ::= SEQUENCE {
   cellPortionID
                            CellPortionID,
   sIRValue
                            SIR-Value,
                            ProtocolExtensionContainer { { Best-Cell-Portions-Item-ExtIEs} }
   iE-Extensions
                                                                                                       OPTIONAL,
Best-Cell-Portions-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BindingID ::= OCTET STRING (SIZE (1..4, ...))
```

```
-- If the Binding ID includes a UDP port, the UDP port is included in octet 1 and 2. The first octet of
-- the UDP port field is included in the first octet of the Binding ID.
BetaCD ::= INTEGER (0..15)
BlockingPriorityIndicator ::= ENUMERATED {
   high,
   normal,
   low,
   . . .
-- High priority: Block resource immediately.
-- Normal priority: Block resource when idle or upon timer expiry.
-- Low priority: Block resource when idle.
SCTD-Indicator ::= ENUMERATED {
   active,
   inactive
BundlingModeIndicator ::= ENUMERATED
   bundling,
   no-bundling
BroadcastCommonTransportBearerIndication ::= SEQUENCE {
   commonTransportChannelID
                                   CommonTransportChannelID,
   cid
                                   C-ID,
   iE-Extensions
                                   OPTIONAL,
BroadcastCommonTransportBearerIndication-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
BroadcastReference ::= BIT STRING (SIZE (24))
-- -----
-- ------
Cause ::= CHOICE {
   radioNetwork
                        CauseRadioNetwork,
   transport
                     CauseTransport,
   protocol
                        CauseProtocol,
   misc
                        CauseMisc,
CauseMisc ::= ENUMERATED {
   control-processing-overload,
   hardware-failure,
   oam-intervention,
```

```
not-enough-user-plane-processing-resources,
    unspecified,
    . . .
CauseProtocol ::= ENUMERATED {
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    abstract-syntax-error-falsely-constructed-message,
CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
    power-level-not-supported,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available,
    rl-already-ActivatedOrAllocated,
    nodeB-Resources-unavailable,
    measurement-not-supported-for-the-object,
    combining-resources-not-available,
    requested-configuration-not-supported,
    synchronisation-failure,
    priority-transport-channel-established,
    sIB-Origination-in-Node-B-not-Supported,
    requested-tx-diversity-mode-not-supported,
    unspecified,
    bCCH-scheduling-error,
    measurement-temporarily-not-available,
    invalid-CM-settings,
    reconfiguration-CFN-not-elapsed,
    number-of-DL-codes-not-supported,
    s-cpich-not-supported,
    combining-not-supported,
    ul-sf-not-supported,
    dl-SF-not-supported,
    common-transport-channel-type-not-supported,
    dedicated-transport-channel-type-not-supported,
    downlink-shared-channel-type-not-supported,
    uplink-shared-channel-type-not-supported,
    cm-not-supported,
    tx-diversity-no-longer-supported,
    unknown-Local-Cell-ID,
    . . . ,
    number-of-UL-codes-not-supported,
    information-temporarily-not-available,
    information-provision-not-supported-for-the-object,
    cell-synchronisation-not-supported,
    cell-synchronisation-adjustment-not-supported,
```

```
dpc-mode-change-not-supported,
    iPDL-already-activated,
    iPDL-not-supported.
    iPDL-parameters-not-available,
    frequency-acquisition-not-supported,
    power-balancing-status-not-compatible,
    requested-typeofbearer-re-arrangement-not-supported,
    signalling-Bearer-Re-arrangement-not-supported,
    bearer-Re-arrangement-needed,
    delayed-activation-not-supported,
    rl-timing-adjustment-not-supported,
    mich-not-supported,
    f-DPCH-not-supported,
    modification-period-not-available,
    pLCCH-not-supported,
    continuous-packet-connectivity-DTX-DRX-operation-not-available,
    continuous-packet-connectivity-UE-DTX-Cycle-not-available,
    mIMO-not-available,
    e-DCH-MACdPDU-SizeFormat-not-available,
    multi-Cell-operation-not-available,
    semi-Persistent-scheduling-not-supported,
    continuous-Packet-Connectivity-DRX-not-supported,
    continuous-Packet-Connectivity-DRX-not-available,
    sixtyfourQAM-DL-and-MIMO-Combined-not-available,
    s-cpich-power-offset-not-available,
    tx-diversity-for-mimo-on-DL-control-channels-not-available,
    dummy-single-Stream-MIMO-not-available,
    dummy-multi-Cell-operation-with-MIMO-not-available,
    dummy-multi-Cell-operation-with-Single-Stream-MIMO-not-available,
    cellSpecificTxDiversityHandlingForMultiCellOperationNotAvailable
CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified,
CCTrCH-ID ::= INTEGER (0..15)
Cell-Capability-Container ::= BIT STRING (SIZE (128))
-- First bit: Cell Specific Tx Diversity Handling For Multi Cell Operation Capability
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
Cell-ERNTI-Status-Information
                                    ::= SEOUENCE (SIZE (1..maxCellinNodeB)) OF Cell-ERNTI-Status-Information-Item
Cell-ERNTI-Status-Information-Item ::= SEQUENCE {
    c-ID
                                                    C-ID,
                                                    Vacant-ERNTI,
    vacant-ERNTI
```

```
Vacant-ERNTI
                  ::= SEQUENCE (SIZE (1..maxERNTItoRelease)) OF E-RNTI
CellParameterID ::= INTEGER (0..127,...)
CellPortionID ::= INTEGER (0..maxNrOfCellPortionsPerCell-1,...)
CellSyncBurstCode ::= INTEGER(0..7, ...)
CellSyncBurstCodeShift ::= INTEGER(0..7)
CellSyncBurstRepetitionPeriod ::= INTEGER (0..4095)
CellSyncBurstSIR ::= INTEGER (0..31)
CellSyncBurstTiming ::= CHOICE {
   initialPhase
                          INTEGER (0..1048575,...),
   steadyStatePhase
                          INTEGER (0..255,...)
CellSyncBurstTimingLCR ::= CHOICE {
                          INTEGER (0..524287,...),
   initialPhase
   steadyStatePhase
                          INTEGER (0..127,...)
CellSyncBurstTimingThreshold ::= INTEGER(0..254)
CFN ::= INTEGER (0..255)
ChipOffset ::= INTEGER (0..38399)
-- Unit Chip
C-ID ::= INTEGER (0..65535)
Closedlooptimingadjustmentmode ::= ENUMERATED {
   adj-1-slot,
   adj-2-slot,
    . . .
CodeRate ::= INTEGER (0..63)
CodeRate-short ::= INTEGER (0..10)
CommonChannelsCapacityConsumptionLaw ::= SEQUENCE (SIZE(1..maxNrOfSF)) OF
   SEQUENCE {
       dl-Cost
                  INTEGER (0..65535),
       ul-Cost
                  INTEGER (0..65535),
       iE-Extensions
                          OPTIONAL,
```

```
CommonChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
Common-EDCH-Capability ::= ENUMERATED
    common-EDCH-capable,
    common-EDCH-non-capable
Common-E-DCH-HSDPCCH-Capability ::= ENUMERATED {
    hSDPCCH-non-capable,
    aCK-NACK-capable,
    aCK-NACK-CQI-capable
Common-EDCH-System-InformationFDD ::= SEQUENCE {
    common-E-DCH-UL-DPCH-Information
                                                     Common-E-DCH-UL-DPCH-InfoItem
                                                                                                                                         OPTIONAL,
    common-E-DCH-EDPCH-Information
                                                     Common-E-DCH-EDPCH-InfoItem
                                                                                                                                         OPTIONAL,
    common-E-DCH-Information
                                                     Common-E-DCH-InfoItem
                                                                                                                                         OPTIONAL,
    common-E-DCH-HSDPCCH-Information
                                                     Common-E-DCH-HSDPCCH-InfoItem
                                                                                                                                  OPTIONAL,
    common-E-DCH-Preamble-Control-Information
                                                     Common-E-DCH-Preamble-Control-InfoItem
                                                                                                                                         OPTIONAL,
    common-E-DCH-FDPCH-Information
                                                     Common-E-DCH-FDPCH-InfoItem
                                                                                                                                         OPTIONAL,
    common-E-DCH-E-AGCH-ChannelisationCodeNumber
                                                     FDD-DL-ChannelisationCodeNumber
                                                                                                                                         OPTIONAL,
    common-E-DCH-Resource-Combination-Information
                                                     Common-E-DCH-Resource-Combination-InfoList
                                                                                                                                         OPTIONAL,
    ul-common-E-DCH-MACflow-Specific-Information
                                                     Ul-common-E-DCH-MACflow-Specific-InfoList
                                                                                                                                         OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { Common-EDCH-System-InformationFDD-ExtIEs } }
                                                                                                                                         OPTIONAL,
    . . .
Common-EDCH-System-InformationFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-RNTI-List-Request
                                    CRITICALITY ignore EXTENSION NULL
                                                                             PRESENCE optional },
    . . .
Common-E-DCH-UL-DPCH-InfoItem ::= SEQUENCE {
    uL-SIR-Target
                                        UL-SIR,
    dPC-Mode
                                        DPC-Mode
                                                                     OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { Common-E-DCH-UL-DPCH-InfoItem-ExtIEs} }
    OPTIONAL,
Common-E-DCH-UL-DPCH-InfoItem-ExtIES NBAP-PROTOCOL-EXTENSION ::=
Common-E-DCH-EDPCH-InfoItem ::= SEQUENCE {
   maxSet-E-DPDCHs
                                                Max-Set-E-DPDCHs,
    ul-PunctureLimit
                                                PunctureLimit,
    e-TFCS-Information
                                                E-TFCS-Information,
```

```
E-TTI,
    e-TTI
    e-DPCCH-PO
                                                 E-DPCCH-PO,
    e-RGCH-2-IndexStepThreshold
                                                 E-RGCH-2-IndexStepThreshold
                                                                                                  OPTIONAL.
    e-RGCH-3-IndexStepThreshold
                                                 E-RGCH-3-IndexStepThreshold
                                                                                                  OPTIONAL,
    hARO-Info-for-E-DCH
                                                 HARO-Info-for-E-DCH,
    iE-Extensions
                                                 ProtocolExtensionContainer { { Common-E-DCH-EDPCH-InfoItem-ExtIEs} }
   OPTIONAL,
    . . .
Common-E-DCH-EDPCH-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
Common-E-DCH-InfoItem
                        ::= SEQUENCE {
    e-DCH-Reference-Power-Offset
                                                 E-DCH-Reference-Power-Offset
                                                                                                  OPTIONAL,
    e-DCH-PowerOffset-for-SchedulingInfo
                                                 E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                  OPTIONAL,
    max-EDCH-Resource-Allocation-for-CCCH
                                                 Max-EDCH-Resource-Allocation-for-CCCH,
    max-Period-for-Collistion-Resolution
                                                 Max-Period-for-Collistion-Resolution,
    max-TB-Sizes
                                                     Max-TB-Sizes
                                                                                                                          OPTIONAL,
    common-E-DCH-ImplicitRelease-Indicator
                                                 BOOLEAN,
                                                 ProtocolExtensionContainer { { Common-E-DCH-InfoItem-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
Common-E-DCH-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-HSDPCCH-InfoItem
                                 ::= SEQUENCE {
    ackNackRepetitionFactor
                                                AckNack-RepetitionFactor,
    ackPowerOffset
                                                 Ack-Power-Offset,
    nackPowerOffset
                                                 Nack-Power-Offset,
    common-E-DCH-COI-Info
                                                 Common-E-DCH-COI-Info
                                                                                              OPTIONAL,
                                                 ProtocolExtensionContainer { Common-E-DCH-HSDPCCH-InfoItem-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
Common-E-DCH-HSDPCCH-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
Common-E-DCH-CQI-Info
                         ::= SEQUENCE {
    cgiFeedback-CycleK
                                                 CQI-Feedback-Cycle,
    cgiRepetitionFactor
                                                 COI-RepetitionFactor
                                                                                              OPTIONAL,
    -- This IE shall be present if the CQI Feedback Cycle k is greater than 0
    cqiPowerOffset
                                                 COI-Power-Offset,
    measurement-Power-Offset
                                                 Measurement-Power-Offset,
```

```
ProtocolExtensionContainer { { Common-E-DCH-CQI-Info-ExtIEs} }
    iE-Extensions
    OPTIONAL.
    . . .
Common-E-DCH-COI-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-Preamble-Control-InfoItem ::= SEQUENCE
    commonPhysicalChannelID
                                                CommonPhysicalChannelID,
    common-E-DCH-PreambleSignatures
                                                PreambleSignatures,
                                                ScramblingCodeNumber,
    scramblingCodeNumber
    preambleThreshold
                                                PreambleThreshold,
    e-AI-Indicator
                                                E-AI-Indicator
                                                                                     OPTIONAL,
    common-E-DCH-AICH-Information
                                                Common-E-DCH-AICH-Information
                                                                                                                      OPTIONAL,
                                                ProtocolExtensionContainer { { Common-E-DCH-Preamble-Control-InfoItem-ExtIEs}
    iE-Extensions
       OPTIONAL,
    . . .
Common-E-DCH-Preamble-Control-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-AICH-Information
                                 ::= SEQUENCE {
    commonPhysicalChannelID
                                                CommonPhysicalChannelID,
    aICH-TransmissionTiming
                                                AICH-TransmissionTiming,
    fdd-dl-ChannelisationCodeNumber
                                                FDD-DL-ChannelisationCodeNumber,
                                                AICH-Power,
    aICH-Power
    sTTD-Indicator
                                                STTD-Indicator,
    iE-Extensions
                                                ProtocolExtensionContainer { { Common-E-DCH-AICH-Information-ExtIEs} }
                                                                                                                                  OPTIONAL,
    . . .
Common-E-DCH-AICH-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::=
Common-E-DCH-FDPCH-InfoItem
                                 ::= SEQUENCE {
    f-DPCH-SlotFormat
                                                F-DPCH-SlotFormat,
                                                FDD-TPC-DownlinkStepSize.
    fdd-TPC-DownlinkStepSize
                                                ProtocolExtensionContainer { { Common-E-DCH-FDPCH-InfoItem-ExtIEs} }
   iE-Extensions
    OPTIONAL,
Common-E-DCH-FDPCH-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
      ID id-Initial-DL-Transmission-Power CRITICALITY ignore
                                                                     EXTENSION DL-Power
                                                                                             PRESENCE optional }
      ID id-Maximum-DL-Power
                                CRITICALITY ignore
                                                         EXTENSION DL-Power
                                                                                 PRESENCE optional } |
     ID id-Minimum-DL-Power
                                                                                 PRESENCE optional },
                                CRITICALITY ignore
                                                         EXTENSION DL-Power
```

```
Common-E-DCH-Resource-Combination-InfoList::= SEQUENCE (SIZE (1.. maxNrOfCommonEDCH)) OF Common-E-DCH-Resource-Combination-InfoList-Item
Common-E-DCH-Resource-Combination-InfoList-Item
                                                     ::= SEQUENCE {
    soffset
                                                Soffset,
    f-DPCH-DL-Code-Number
                                                FDD-DL-ChannelisationCodeNumber,
    ul-DPCH-ScramblingCode
                                                UL-ScramblingCode,
    e-RGCH-E-HICH-Channelisation-Code
                                                FDD-DL-ChannelisationCodeNumber,
    e-RGCH-Signature-Sequence
                                                E-RGCH-Signature-Sequence
        OPTIONAL,
    e-HICH-Signature-Sequence
                                                E-HICH-Signature-Sequence,
    iE-Extensions
                                                ProtocolExtensionContainer { { Common-E-DCH-Resource-Combination-InfoList-Item-ExtIEs} }
                OPTIONAL,
Common-E-DCH-Resource-Combination-InfoList-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Ul-common-E-DCH-MACflow-Specific-InfoList
                                              ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF Ul-common-E-DCH-MACflow-Specific-InfoList-Item
Ul-common-E-DCH-MACflow-Specific-InfoList-Item
                                                     ::= SEQUENCE {
    ul-Common-MACFlowID
                                                         Common-MACFlow-ID,
    transportBearerRequestIndicator
                                                         TransportBearerRequestIndicator,
    bindingID
                                                         BindingID
                                                                                                                         OPTIONAL,
    transportLayerAddress
                                                        TransportLayerAddress
                                                                                                                         OPTIONAL,
    tnlOos
                                                         Tnl0os
                                                                                                                         OPTIONAL,
    payloadCRC-PresenceIndicator
                                                         PayloadCRC-PresenceIndicator,
    bundlingModeIndicator
                                                         BundlingModeIndicator
                                                                                                                         OPTIONAL,
    common-E-DCH-MACdFlow-Specific-Information
                                                         Common-E-DCH-MACdFlow-Specific-InfoList,
                                                         ProtocolExtensionContainer { { Ul-common-E-DCH-MACflow-Specific-InfoList-Item-ExtIEs} }
    iE-Extensions
                    OPTIONAL,
Ul-common-E-DCH-MACflow-Specific-InfoList-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-MACdFlow-Specific-InfoList::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlows)) OF Common-E-DCH-MACdFlow-Specific-InfoList-Item
Common-E-DCH-MACdFlow-Specific-InfoList-Item
                                                     ::= SEOUENCE {
    common-e-DCH-MACdFlow-ID
                                                    E-DCH-MACdFlow-ID,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                    Maximum-Number-of-Retransmissions-For-E-DCH,
    eDCH-HARQ-PO-FDD
                                                    E-DCH-HARQ-PO-FDD,
    eDCH-MACdFlow-Multiplexing-List
                                                    E-DCH-MACdFlow-Multiplexing-List
                            OPTIONAL,
    common-E-DCHLogicalChannelInformation
                                                     Common-E-DCH-LogicalChannel-InfoList,
    iE-Extensions
                                                     ProtocolExtensionContainer { { Common-E-DCH-MACdFlow-Specific-InfoList-Item-ExtIEs} }
           OPTIONAL,
    . . .
```

```
Common-E-DCH-MACdFlow-Specific-InfoList-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-LoqicalChannel-InfoList::= SEQUENCE (SIZE (1.. maxNoOfLoqicalChannels)) OF Common-E-DCH-LoqicalChannel-InfoList-Item
Common-E-DCH-LogicalChannel-InfoList-Item ::= SEQUENCE {
   logicalChannelId
                                  LogicalChannelID,
   maximumMACcPDU-SizeExtended
                                  MAC-PDU-SizeExtended,
                                                 ProtocolExtensionContainer { { Common-E-DCH-LogicalChannel-InfoList-Item-ExtIEs} }
   iE-Extensions
       OPTIONAL,
Common-E-DCH-LogicalChannel-InfoList-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-schedulingPriorityIndicator CRITICALITY ignore
                                                         EXTENSION SchedulingPriorityIndicator
                                                                                                              PRESENCE optional },
Common-EDCH-System-Information-ResponseFDD
                                              ::= SEQUENCE {
   ul-common-E-DCH-MACflow-Specific-InfoResponse
                                                         Ul-common-E-DCH-MACflow-Specific-InfoResponseList,
    serving-Grant-Value
                                                         E-Serving-Grant-Value,
   iE-Extensions
                                                         ProtocolExtensionContainer { { Common-EDCH-System-Information-ResponseFDD-ExtIEs} }
                   OPTIONAL,
Common-EDCH-System-Information-ResponseFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-E-RNTI-List CRITICALITY ignore
                                         EXTENSION E-RNTI-List PRESENCE optional },
    . . .
E-RNTI-List
                   ::= SEQUENCE (SIZE (1..maxofERNTI)) OF E-RNTI
Ul-common-E-DCH-MACflow-Specific-InfoResponseList
                                                     ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF Ul-common-E-DCH-MACflow-Specific-
InfoResponseList-Item
Ul-common-E-DCH-MACflow-Specific-InfoResponseList-Item
                                                          ::= SEQUENCE {
   ul-Common-MACFlowID
                                                     Common-MACFlow-ID,
   bindingID
                                                     BindingID
                                                                                                                   OPTIONAL,
   transportLayerAddress
                                                     TransportLayerAddress
                                                                                                                   OPTIONAL,
   iE-Extensions
                                                     ExtIEs } }
                          OPTIONAL,
Ul-common-E-DCH-MACflow-Specific-InfoResponseList-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-MACFlows-to-DeleteFDD ::= SEQUENCE (SIZE (1.. maxNrOfCommonMACFlows)) OF Common-MACFlows-to-DeleteFDD-Item
```

```
Common-MACFlows-to-DeleteFDD-Item ::= SEQUENCE {
    common-MACFlow-ID
                                                     Common-MACFlow-ID.
    iE-Extensions
                                                     ProtocolExtensionContainer { { Common-MACFlows-to-DeleteFDD-Item-ExtIEs} }
        OPTIONAL.
Common-MACFlows-to-DeleteFDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-MACFlow-ID ::= INTEGER (0..maxNrOfCommonMACFlows-1)
CommonMACFlow-Specific-InfoList ::= SEOUENCE (SIZE (1.. maxNrOfCommonMACFlows)) OF CommonMACFlow-Specific-InfoItem
CommonMACFlow-Specific-InfoItem ::= SEQUENCE {
    common-MACFlow-Id
                                                     Common-MACFlow-ID,
    bindingID
                                                     BindingID
                                                                                                 OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                                 OPTIONAL,
                                                     Tnl0os
                                                                                                 OPTIONAL,
    tnl-qos
    common-MACFlow-PriorityQueue-Information
                                                     Common-MACFlow-PriorityQueue-Information
                                                                                                 OPTIONAL,
                                                     ProtocolExtensionContainer { { CommonMACFlow-Specific-InfoItem-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
CommonMACFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TransportBearerRequestIndicator
                                                CRITICALITY ignore EXTENSION TransportBearerRequestIndicator
                                                                                                                     PRESENCE optional },
    -- This IE should not be contained if the MAC flow is setup in procedure, and it should be contained if the MAC flow is modified in procedure.
CommonMACFlow-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF CommonMACFlow-Specific-InfoItem-Response
CommonMACFlow-Specific-InfoItem-Response ::= SEQUENCE {
    commonMACFlow-ID
                                                     Common-MACFlow-ID,
    bindingID
                                                     BindingID
                                                                                                 OPTIONAL,
    transportLayerAddress
                                                    TransportLayerAddress
                                                                                                 OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation
                                                     HSDSCH-Initial-Capacity-Allocation
                                                                                                 OPTIONAL,
                                                     ProtocolExtensionContainer { { CommonMACFlow-Specific-InfoItem-Response-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
CommonMACFlow-Specific-InfoItem-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-MACFlow-PriorityQueue-Information ::= SEQUENCE (SIZE (1..maxNrOfcommonMACQueues)) OF Common-MACFlow-PriorityQueue-Item
Common-MACFlow-PriorityQueue-Item ::= SEQUENCE {
    priority-Queue-Information-for-Enhanced-FACH
                                                         Priority-Queue-Information-for-Enhanced-FACH-PCH,
```

```
iE-Extensions
                                                         ProtocolExtensionContainer { { Common-MACFlow-PriorityQueue-Item-ExtIEs } }
    OPTIONAL.
    . . .
Common-MACFlow-PriorityOueue-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass
                                            TUTRANGPSAccuracyClass,
    tUTRANGANSSMeasurementAccuracyClass
                                            TUTRANGANSSAccuracyClass
CommonMeasurementType ::= ENUMERATED {
    received-total-wide-band-power,
    transmitted-carrier-power,
    acknowledged-prach-preambles,
    ul-timeslot-iscp,
    notUsed-1-acknowledged-PCPCH-access-preambles,
    notUsed-2-detected-PCPCH-access-preambles,
    uTRAN-GPS-Timing-of-Cell-Frames-for-UE-Positioning,
    sFN-SFN-Observed-Time-Difference,
    transmittedCarrierPowerOfAllCodesNotUsedForHSTransmission,
    hS-DSCH-Required-Power,
    hS-DSCH-Provided-Bit-Rate,
    received-total-wide-band-power-for-cellPortion,
    transmitted-carrier-power-for-cellPortion,
    transmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmission-for-cellPortion,
    upPTS-Interference,
    dLTransmissionBranchLoad,
    hS-DSCH-Required-Power-for-cell-portion,
    hS-DSCH-Provided-Bit-Rate-for-cell-portion,
    e-DCH-Provided-Bit-Rate,
    e-DCH-Non-serving-Relative-Grant-Down-Commands,
    received-Scheduled-EDCH-Power-Share,
    received-Scheduled-EDCH-Power-Share-for-cellPortion,
    uTRAN-GANSS-timing-of-cell-frames-for-UE-Positioning,
    eDCH-RACH-report
CommonMeasurementValue ::= CHOICE {
    transmitted-carrier-power
                                                         Transmitted-Carrier-Power-Value,
    received-total-wide-band-power
                                                         Received-total-wide-band-power-Value,
    acknowledged-prach-preambles
                                                         Acknowledged-PRACH-preambles-Value,
                                                         UL-TimeslotISCP-Value,
    uL-TimeslotISCP
    notUsed-1-acknowledged-PCPCH-access-preambles
                                                         NULL,
    notUsed-2-detected-PCPCH-access-preambles
                                                         NULL,
```

```
extension-CommonMeasurementValue
                                          Extension-CommonMeasurementValue
Extension-CommonMeasurementValue
                                   ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementValueIE }}
Extension-CommonMeasurementValueIE NBAP-PROTOCOL-IES ::= {
    { ID id-TUTRANGPSMeasurementValueInformation
                                                          CRITICALITY ignore TYPE TUTRANGPSMeasurementValueInformation
                                                                                                                                   PRESENCE
mandatory } |
    { ID id-SFNSFNMeasurementValueInformation
                                                          CRITICALITY ignore TYPE SFNSFNMeasurementValueInformation
                                                                                                                                   PRESENCE
mandatory } |
    TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue
                                                                  PRESENCE mandatory }
    { ID id-HS-DSCHRequiredPowerValueInformation
                                                          CRITICALITY ignore TYPE HS-DSCHRequiredPower
       PRESENCE mandatory } |
     ID id-HS-DSCHProvidedBitRateValueInformation
                                                          CRITICALITY ignore TYPE HS-DSCHProvidedBitRate
    PRESENCE mandatory } |
    { ID id-Transmitted-Carrier-Power-For-CellPortion-Value CRITICALITY ignore TYPE Transmitted-Carrier-Power-For-CellPortion-Value PRESENCE
mandatory } |
    { ID id-Received-total-wide-band-power-For-CellPortion-Value
                                                                  CRITICALITY ignore TYPE Received-total-wide-band-power-For-CellPortion-Value
    PRESENCE mandatory } |
    { ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValue
                                                                                                                            CRITICALITY ignore
   TYPE TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValue
                                                                                                                            PRESENCE mandatory
    { ID id-UpPTSInterferenceValue
                                                                  CRITICALITY ignore TYPE UppTSInterferenceValue
                   PRESENCE mandatory } |
    { ID id-DLTransmissionBranchLoadValue
                                                                  CRITICALITY ignore TYPE DLTransmissionBranchLoadValue
               PRESENCE mandatory } |
    { ID id-HS-DSCHRequiredPowerValueInformation-For-CellPortion
                                                                  CRITICALITY ignore TYPE HS-DSCHRequiredPowerValueInformation-For-CellPortion
    PRESENCE mandatory } |
    { ID id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion CRITICALITY ignore TYPE HS-DSCHProvidedBitRateValueInformation-For-CellPortion
    PRESENCE mandatory } |
    { ID id-E-DCHProvidedBitRateValueInformation
                                                                  CRITICALITY ignore TYPE E-DCHProvidedBitRate
                       PRESENCE mandatory } |
    { ID id-E-DCH-Non-serving-Relative-Grant-Down-CommandsValue
                                                                  CRITICALITY ignore TYPE E-DCH-Non-serving-Relative-Grant-Down-Commands
       PRESENCE mandatory }
    { ID id-Received-Scheduled-EDCH-Power-Share-Value CRITICALITY ignore TYPE Received-Scheduled-EDCH-Power-Share-Value
                                                                                                                            PRESENCE mandatory
    ID id-Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value CRITICALITY ignore TYPE Received-Scheduled-EDCH-Power-Share-For-
CellPortion-Value PRESENCE mandatory }
     ID id-TUTRANGANSSMeasurementValueInformation
                                                      CRITICALITY ignore TYPE TUTRANGANSSMeasurementValueInformation PRESENCE mandatory } |
     ID id-EDCH-RACH-Report-Value
                                                      CRITICALITY ignore TYPE EDCH-RACH-Report-Value
                                                                                                                            PRESENCE mandatory }
       -- FDD only
CommonMeasurementValueInformation ::= CHOICE
    measurementAvailable
                               CommonMeasurementAvailable,
    measurementnotAvailable
                               CommonMeasurementnotAvailable
CommonMeasurementAvailable::= SEQUENCE {
    commonmeasurementValue
                               CommonMeasurementValue,
```

```
ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} }
    ie-Extensions
                                                                                                                         OPTIONAL,
CommonMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonMeasurementnotAvailable ::= NULL
CommonPhysicalChannelID ::= INTEGER (0..255)
CommonPhysicalChannelID768 ::= INTEGER (0..511)
Common-PhysicalChannel-Status-Information ::= SEQUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
    iE-Extensions
                                        ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information-ExtIEs} }
                                                                                                                                        OPTIONAL.
Common-PhysicalChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-PhysicalChannel-Status-Information768 ::= SEQUENCE {
    commonPhysicalChannelID768
                                        CommonPhysicalChannelID768,
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
    iE-Extensions
                                        ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information768-ExtIEs} }
                                                                                                                                        OPTIONAL.
Common-PhysicalChannel-Status-Information768-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonTransportChannelID ::= INTEGER (0..255)
CommonTransportChannel-InformationResponse ::= SEQUENCE {
    commonTransportChannelID
                                        CommonTransportChannelID,
    bindingID
                                        BindingID
                                                                OPTIONAL.
    transportLayerAddress
                                        TransportLayerAddress OPTIONAL,
                                        ProtocolExtensionContainer { { CommonTransportChannel-InformationResponse-ExtIEs} }
    iE-Extensions
                                                                                                                                        OPTIONAL,
    . . .
CommonTransportChannel-InformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
           id-BroadcastCommonTransportBearerIndication CRITICALITY ignore EXTENSION BroadcastCommonTransportBearerIndication
                                                                                                                                 PRESENCE optional
} |
```

```
id-IPMulticastDataBearerIndication
                                                         CRITICALITY ignore EXTENSION IPMulticastDataBearerIndication
PRESENCE optional },
Common-TransportChannel-Status-Information ::= SEQUENCE {
    commonTransportChannelID
                                        CommonTransportChannelID,
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
                                        ProtocolExtensionContainer { { Common-TransportChannel-Status-Information-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
Common-TransportChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationControlPortID ::= INTEGER (0..65535)
Compressed-Mode-Deactivation-Flag::= ENUMERATED {
    deactivate,
    maintain-Active
ConfigurationGenerationID ::= INTEGER (0..255)
-- Value '0' means "No configuration"
ConstantValue ::= INTEGER (-10..10,...)
-- -10 dB - +10 dB
-- unit dB
-- step 1 dB
ContinuousPacketConnectivityDTX-DRX-Capability ::= ENUMERATED {
    continuous-Packet-Connectivity-DTX-DRX-capable,
    continuous-Packet-Connectivity-DTX-DRX-non-capable
ContinuousPacketConnectivityDTX-DRX-Information ::= SEQUENCE {
    uE-DTX-DRX-Offset
                                                UE-DTX-DRX-Offset,
    enabling-Delay
                                                Enabling-Delay,
    dTX-Information
                                                DTX-Information,
    dRX-Information
                                                DRX-Information
                                                                                     OPTIONAL,
                                                ProtocolExtensionContainer { { ContinuousPacketConnectivityDTX-DRX-Information-ExtIEs } }
    iE-Extensions
        OPTIONAL,
    . . .
ContinuousPacketConnectivityDTX-DRX-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
ContinuousPacketConnectivityDTX-DRX-Information-to-Modify ::= SEQUENCE {
    uE-DTX-DRX-Offset
                                                UE-DTX-DRX-Offset
                                                                                         OPTIONAL,
```

```
enabling-Delay
                                                Enabling-Delay
                                                                                         OPTIONAL,
    dTX-Information-to-Modify
                                                DTX-Information-to-Modify
                                                                                         OPTIONAL,
    dRX-Information-to-Modify
                                                DRX-Information-to-Modify
                                                                                         OPTIONAL.
    iE-Extensions
                                                ProtocolExtensionContainer { { ContinuousPacketConnectivityDTX-DRX-Information-to-Modify-ExtIEs } }
           OPTIONAL.
    . . .
ContinuousPacketConnectivityDTX-DRX-Information-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ContinuousPacketConnectivityHS-SCCH-less-Capability ::= ENUMERATED {
    continuous-Packet-Connectivity-HS-SCCH-less-capable,
    continuous-Packet-Connectivity-HS-SCCH-less-capable-non-capable
ContinuousPacketConnectivityHS-SCCH-less-Information ::= SEQUENCE (SIZE (1..maxNrOfHS-DSCH-TBSs-HS-SCCHless)) OF ContinuousPacketConnectivityHS-
SCCH-less-InformationItem
ContinuousPacketConnectivityHS-SCCH-less-InformationItem ::= SEQUENCE {
    transport-Block-Size-Index
                                            Transport-Block-Size-Index,
    hSPDSCH-Second-Code-Support
                                            HSPDSCH-Second-Code-Support,
    iE-Extensions
                                            ProtocolExtensionContainer { { ContinuousPacketConnectivityHS-SCCH-less-Information-ExtIEs } }
        OPTIONAL,
ContinuousPacketConnectivityHS-SCCH-less-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ContinuousPacketConnectivityHS-SCCH-less-Information-Response ::= SEQUENCE {
    hSPDSCH-First-Code-Index
                                            HSPDSCH-First-Code-Index,
    hSPDSCH-Second-Code-Index
                                            HSPDSCH-Second-Code-Index
                                                                                     OPTIONAL,
                                            ProtocolExtensionContainer { { ContinuousPacketConnectivityHS-SCCH-less-Information-Response-ExtIEs } }
    iE-Extensions
           OPTIONAL,
    . . .
ContinuousPacketConnectivityHS-SCCH-less-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
ControlGAP ::= INTEGER (1..255)
CPC-Information ::= SEQUENCE {
    continuousPacketConnectivityDTX-DRX-Information
                                                                     ContinuousPacketConnectivityDTX-DRX-Information
        OPTIONAL,
    continuousPacketConnectivityDTX-DRX-Information-to-Modify
                                                                     ContinuousPacketConnectivityDTX-DRX-Information-to-Modify
                                                                                                                                         OPTIONAL,
```

```
continuousPacketConnectivityHS-SCCH-less-Information
                                                          ContinuousPacketConnectivityHS-SCCH-less-Information
   OPTIONAL.
   iE-Extensions
                           OPTIONAL,
CPC-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   less-Deactivate-Indicator PRESENCE optional },
ContinuousPacketConnectivityHS-SCCH-less-Deactivate-Indicator ::= NULL
COI-DTX-Timer ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity}
   -- Unit subframe
COI-Feedback-Cycle ::= ENUMERATED {v0, v2, v4, v8, v10, v20, v40, v80, v160,..., v16, v32, v64}
CQI-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [9] subclause 4.2.1
CQI-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
CriticalityDiagnostics ::= SEQUENCE {
   procedureID
                           ProcedureID
                                                OPTIONAL,
                           TriggeringMessage
   triggeringMessage
                                                   OPTIONAL,
   procedureCriticality
                           Criticality
                                                OPTIONAL,
   transactionID
                           TransactionID
                                                   OPTIONAL,
   ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} }
   iE-Extensions
                                                                                                   OPTIONAL,
   . . .
CriticalityDiagnostics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
   SEQUENCE {
      iECriticality
                       Criticality,
      iE-ID
                        ProtocolIE-ID.
      repetitionNumber
                       RepetitionNumber0
                                            OPTIONAL,
                       ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} }
      iE-Extensions
                                                                                                       OPTIONAL,
CriticalityDiagnostics-IE-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-MessageStructure
                              CRITICALITY ignore
                                                   EXTENSION MessageStructure
                                                                               PRESENCE optional
      ID id-TypeOfError
                              CRITICALITY ignore
                                                   EXTENSION TypeOfError
                                                                              PRESENCE mandatory
```

```
CRNC-CommunicationContextID ::= INTEGER (0..1048575)
CSBMeasurementID ::= INTEGER (0..65535)
CSBTransmissionID ::= INTEGER (0..65535)
Common-EDCH-System-InformationLCR ::= SEQUENCE {
    ul-common-E-DCH-MACflow-Specific-InformationLCR
                                                             Ul-common-E-DCH-MACflow-Specific-InfoListLCR
    OPTIONAL,
    common-E-PUCH-InformationLCR
                                                             Common-E-PUCH-InformationLCR
    OPTIONAL,
    e-TFCS-Information-TDD
                                                            E-TFCS-Information-TDD
    OPTIONAL,
    maximum-Number-of-Retransmissions-For-SchedulingInfo
                                                                         Maximum-Number-of-Retransmissions-For-E-DCH
    OPTIONAL,
    eDCH-Retransmission-Timer-SchedulingInfo
                                                                  E-DCH-MACdFlow-Retransmission-Timer
    OPTIONAL,
    iE-Extensions
                                                             ProtocolExtensionContainer { { Common-EDCH-System-InformationLCR-ExtIEs } }
    OPTIONAL,
Common-EDCH-System-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 ID id-UL-Synchronisation-Parameters-For-FACHLCR
                                                             CRITICALITY reject
                                                                                     EXTENSION UL-Synchronisation-Parameters-LCR PRESENCE optional }
 ID id-PhysicalChannelID-for-CommonERNTI-RequestedIndicator
                                                                CRITICALITY ignore
                                                                                     EXTENSION
                                                                                                 PhysicalChannelID-for-CommonERNTI-
RequestedIndicator PRESENCE optional } |
{ ID id-Ul-common-E-DCH-MACflow-Specific-InfoListLCR-Ext
                                                            CRITICALITY ignore
                                                                                     EXTENSION
                                                                                                 Ul-common-E-DCH-MACflow-Specific-InfoListLCR-Ext
    PRESENCE optional },
Common-E-PUCH-InformationLCR ::= SEQUENCE {
   minCR
                                                CodeRate,
    maxCR
                                                CodeRate,
                                                HARO-Info-for-E-DCH,
    harqInfo
    pRXdes-base-perURAFCN
                                                PRXdes-base-perURAFCN
                                                                                     OPTIONAL,
    e-PUCH-TPC-StepSize
                                                TDD-TPC-UplinkStepSize-LCR
                                                                                     OPTIONAL,
                                                TDD-TPC-DownlinkStepSize
    e-AGCH-TPC-StepSize
                                                                                     OPTIONAL,
    e-PUCH-PowerControlGAP
                                                ControlGAP
                                                                                     OPTIONAL,
                                                ProtocolExtensionContainer { Common-E-PUCH-InformationLCR-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
Common-E-PUCH-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRXdes-base-perURAFCN ::= SEQUENCE (SIZE (1.. maxFrequencyinCell)) OF PRXdes-base-Item
PRXdes-base-Item ::= SEQUENCE {
    pRXdes-base
                                                PRXdes-base,
```

```
UARFCN
    uARFCN
                                                                                                 OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { PRXdes-base-Item-ExtIEs} } 
                                                                                                                          OPTIONAL,
PRXdes-base-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Ul-common-E-DCH-MACflow-Specific-InfoListLCR ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF Ul-common-E-DCH-MACflow-Specific-InfoList-ItemLCR
Ul-common-E-DCH-MACflow-Specific-InfoListLCR-Ext ::= SEOUENCE (SIZE (1.. maxNrOfCommonMACFlowsLCRExt)) OF Ul-common-E-DCH-MACflow-Specific-
InfoList-ItemLCR
Ul-common-E-DCH-MACflow-Specific-InfoList-ItemLCR
                                                          ::= SEQUENCE {
    ul-Common-MACFlowIDLCR
                                                         Common-MACFlow-ID-LCR,
    transportBearerRequestIndicator
                                                         TransportBearerRequestIndicator
                                                                                                                          OPTIONAL,
    bindingID
                                                         BindingID
                                                                                                                          OPTIONAL,
    transportLayerAddress
                                                         TransportLayerAddress
                                                                                                                          OPTIONAL,
    tnl0os
                                                         Tnl0os
                                                                                                                          OPTIONAL,
    payloadCRC-PresenceIndicator
                                                         PayloadCRC-PresenceIndicator
                                                                                                                          OPTIONAL,
    common-E-DCH-MACdFlow-Specific-InformationLCR
                                                         Common-E-DCH-MACdFlow-Specific-InfoListLCR
                                                                                                                          OPTIONAL,
    uARFCN
                                                                                                                          OPTIONAL,
                                                         ProtocolExtensionContainer { { Ul-common-E-DCH-MACflow-Specific-InfoList-ItemLCR-ExtIEs} }
    iE-Extensions
                    OPTIONAL,
    . . .
Ul-common-E-DCH-MACflow-Specific-InfoList-ItemLCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    . . .
Common-E-DCH-MACdFlow-Specific-InfoListLCR ::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlowsLCR)) OF Common-E-DCH-MACdFlow-Specific-InfoList-ItemLCR
Common-E-DCH-MACdFlow-Specific-InfoList-ItemLCR
                                                     ::= SEQUENCE {
    common-e-DCH-MACdFlow-ID
                                                     E-DCH-MACdFlow-ID-LCR,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                    Maximum-Number-of-Retransmissions-For-E-DCH
                                                                                                                          OPTIONAL,
    eDCH-MACdFlow-Multiplexing-List
                                                     E-DCH-MACdFlow-Multiplexing-List
    OPTIONAL,
    common-E-DCHLogicalChannelInformation
                                                     Common-E-DCH-LogicalChannel-InfoList
                                                                                                                          OPTIONAL,
    eDCH-HARO-PO-TDD
                                                     E-DCH-HARO-PO-TDD
    OPTIONAL,
    eDCH-MACdFlow-Retransmission-Timer
                                                     E-DCH-MACdFlow-Retransmission-Timer
                                                                                                                          OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { Common-E-DCH-MACdFlow-Specific-InfoList-ItemLCR-ExtIEs} }
           OPTIONAL,
    . . .
Common-E-DCH-MACdFlow-Specific-InfoList-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
Common-EDCH-System-Information-ResponseLCR ::= SEQUENCE {
   ul-common-E-DCH-MACflow-Specific-InfoResponseLCR
                                                         Ul-common-E-DCH-MACflow-Specific-InfoResponseListLCR
                                                                                                                  OPTIONAL.
   common-E-AGCH-ListLCR
                                                         Common-E-AGCH-ListLCR
                                                                                                                  OPTIONAL,
   common-E-HICH-ListLCR
                                                         Common-E-HICH-ListLCR
                                                                                                                  OPTIONAL.
   common-E-RNTI-Info-LCR
                                                         Common-E-RNTI-Info-LCR
                                                                                                                  OPTIONAL,
   iE-Extensions
                                                         ProtocolExtensionContainer { { Common-EDCH-System-Information-ResponseLCR-ExtIEs} }
                  OPTIONAL,
Common-EDCH-System-Information-ResponseLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   InfoResponseListLCR-Ext
                         PRESENCE optional },
Ul-common-E-DCH-MACflow-Specific-InfoResponseListLCR ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF Ul-common-E-DCH-MACflow-Specific-
InfoResponseList-ItemLCR
Ul-common-E-DCH-MACflow-Specific-InfoResponseListLCR-Ext ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlowsLCRExt)) OF Ul-common-E-DCH-MACflow-Specific-
InfoResponseList-ItemLCR
Ul-common-E-DCH-MACflow-Specific-InfoResponseList-ItemLCR ::= SEOUENCE {
   ul-Common-MACFlowID-LCR
                                                  Common-MACFlow-ID-LCR,
   bindingID
                                                  BindingID
                                                                                                            OPTIONAL.
   transportLayerAddress
                                                  TransportLayerAddress
                                                                                                            OPTIONAL,
   uARFCN
                                                  UARFCN
                                                                                                            OPTIONAL,
   -- the IE is not used.
   iE-Extensions
                                                  ExtIEs } }
                         OPTIONAL,
Ul-common-E-DCH-MACflow-Specific-InfoResponseList-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-AGCH-ListLCR ::= SEQUENCE (SIZE (1.. maxNrOfEAGCHsLCR)) OF Common-E-AGCH-ItemLCR
Common-E-AGCH-ItemLCR ::= SEQUENCE {
   e-AGCH-ID
                                           E-AGCH-Id,
   uARFCN
                                           UARFCN
                                                                                      OPTIONAL,
   -- the IE is not used.
   iE-Extensions
                                       ProtocolExtensionContainer { { Common-E-AGCH-ItemLCR-ExtIEs} } }
                                                                                                            OPTIONAL,
Common-E-AGCH-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
Common-E-HICH-ListLCR ::= SEQUENCE (SIZE (1.. maxNrOfEHICHsLCR)) OF Common-E-HICH-ItemLCR
```

```
Common-E-HICH-ItemLCR ::= SEQUENCE {
    еI
                                            EI.
    e-HICH-ID
                                            E-HICH-ID-LCR.
    iE-Extensions
                                            ProtocolExtensionContainer { { Common-E-HICH-ItemLCR-ExtIEs} }
                                                                                                                          OPTIONAL,
Common-E-HICH-ItemLCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
Common-E-RNTI-Info-LCR ::= SEOUENCE (SIZE (1.. maxnrofERUCCHsLCR)) OF Common-E-RNTI-Info-ItemLCR
Common-E-RNTI-Info-ItemLCR ::= SEQUENCE {
    starting-E-RNTI
                                            E-RNTI,
   number-of-Group
                                            INTEGER (1..32),
    number-of-e-E-RNTI-perGroup
                                            INTEGER (1..7),
                                            ProtocolExtensionContainer { { Common-E-RNTI-Info-ItemLCR-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
Common-E-RNTI-Info-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
{ ID id-AssociatedPhsicalChannelID CRITICALITY reject
                                                            EXTENSION CommonPhysicalChannelID PRESENCE optional },
    . . .
Common-MACFlows-to-DeleteLCR ::= SEOUENCE (SIZE (1.. maxNrOfCommonMACFlowsLCR)) OF Common-MACFlows-to-DeleteLCR-Item
Common-MACFlows-to-DeleteLCR-Item ::= SEQUENCE {
    common-MACFlow-ID-LCR
                                                     Common-MACFlow-ID-LCR,
                                                     ProtocolExtensionContainer { { Common-MACFlows-to-DeleteLCR-Item-ExtIEs} }
    iE-Extensions
       OPTIONAL,
    . . .
Common-MACFlows-to-DeleteLCR-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-MACFlow-ID-LCR ::= INTEGER (0..maxNrOfCommonMACFlowsLCR-1)
CommonMACFlow-Specific-InfoListLCR ::= SEQUENCE (SIZE (1.. maxNrOfCommonMACFlowsLCR)) OF CommonMACFlow-Specific-InfoItemLCR
CommonMACFlow-Specific-InfoItemLCR ::= SEQUENCE {
    common-MACFlow-ID-LCR
                                                     Common-MACFlow-ID-LCR,
    bindingID
                                                     BindingID
                                                                                                 OPTIONAL,
    transportLayerAddress
                                                    TransportLayerAddress
                                                                                                 OPTIONAL,
                                                                                                 OPTIONAL,
    common-MACFlow-PriorityQueue-InformationLCR
                                                    Common-MACFlow-PriorityQueue-Information
                                                                                                 OPTIONAL,
    transportBearerRequestIndicator
                                                    TransportBearerRequestIndicator
                                                                                                 OPTIONAL,
    uARFCN
                                                    UARFCN
                                                                                                 OPTIONAL,
                                                    ProtocolExtensionContainer { { CommonMACFlow-Specific-InfoItemLCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
```

```
CommonMACFlow-Specific-InfoItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-H-RNTI-InformationLCR ::= SEOUENCE (SIZE (1.. maxNoOfCommonH-RNTI)) OF Common-H-RNTI-InfoItemLCR
Common-H-RNTI-InfoItemLCR ::= SEQUENCE {
                                                    HSDSCH-RNTI,
    common-H-RNTI
                                                    ProtocolExtensionContainer { { Common-H-RNTI-InfoItemLCR-ExtIEs } }
   iE-Extensions
                                                                                                                                 OPTIONAL,
Common-H-RNTI-InfoItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Sync-InformationLCR ::= SEQUENCE {
    t-SYNC
                                                    T-SYNC,
    t-PROTECT
                                                    T-PROTECT,
   n-PROTECT
                                                    N-PROTECT,
                                                    ProtocolExtensionContainer { { Sync-InformationLCR-ExtIEs } }
   iE-Extensions
                                                                                                                          OPTIONAL,
Sync-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonMACFlow-Specific-InfoList-ResponseLCR ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF CommonMACFlow-Specific-InfoItem-ResponseLCR
CommonMACFlow-Specific-InfoList-ResponseLCR-Ext ::= SEQUENCE (SIZE (1.. maxNrOfCommonMACFlowsLCRExt)) OF CommonMACFlow-Specific-InfoItem-
ResponseLCR
CommonMACFlow-Specific-InfoItem-ResponseLCR ::= SEQUENCE {
    common-MACFlow-ID-LCR
                                                         Common-MACFlow-ID-LCR,
    bindingID
                                                     BindingID
                                                                                                 OPTIONAL,
    transportLayerAddress
                                                    TransportLayerAddress
                                                                                                 OPTIONAL,
                                                                                                 OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation
                                                    HSDSCH-Initial-Capacity-Allocation
                                                    ProtocolExtensionContainer { { CommonMACFlow-Specific-InfoItem-ResponseLCR-ExtIEs} }
    iE-Extensions
       OPTIONAL,
    . . .
CommonMACFlow-Specific-InfoItem-ResponseLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CPC-InformationLCR ::= SEQUENCE {
    continuousPacketConnectivity-DRX-InformationLCR
                                                                ContinuousPacketConnectivity-DRX-InformationLCR
       OPTIONAL,
```

```
continuousPacketConnectivity-DRX-Information-to-Modify-LCR
                                                           ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR
   OPTIONAL.
   hS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                       HS-DSCH-Semi-PersistentScheduling-Information-LCR
          OPTIONAL,
   hS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR
   OPTIONAL,
   hS-DSCH-SPS-Deactivate-Indicator-LCR
                                                       NULL
                                                                  OPTIONAL,
   e-DCH-Semi-PersistentScheduling-Information-LCR
                                                       E-DCH-Semi-PersistentScheduling-Information-LCR
      OPTIONAL,
   e-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR
                                                       E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR
   OPTIONAL,
   e-DCH-SPS-Deactivate-Indicator-LCR
                                                       NULL
                                                                  OPTIONAL,
   iE-Extensions
                            OPTIONAL.
CPC-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ContinuousPacketConnectivity-DRX-CapabilityLCR ::= ENUMERATED {
   continuous-Packet-Connectivity-DRX-Capable,
   continuous-Packet-Connectivity-DRX-Non-Capable
ContinuousPacketConnectivity-DRX-InformationLCR ::= SEQUENCE {
   enabling-Delay
                                         Enabling-Delay,
   hS-SCCH-DRX-Information-LCR
                                         HS-SCCH-DRX-Information-LCR,
   e-AGCH-DRX-Information-LCR
                                         E-AGCH-DRX-Information-LCR
                                                                         OPTIONAL,
   iE-Extensions
                                         OPTIONAL,
   . . .
ContinuousPacketConnectivity-DRX-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Enabling-Delay-Ext-LCR
                                  CRITICALITY ignore EXTENSION Enabling-Delay-Ext-LCR
                                                                                     PRESENCE optional },
HS-SCCH-DRX-Information-LCR ::= SEQUENCE {
   hS-SCCH-UE-DRX-Cycle-LCR
                                                       UE-DRX-Cycle-LCR,
   hS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR
                                                       Inactivity-Threshold-for-UE-DRX-Cycle-LCR
                                                                                                               OPTIONAL,
   hS-SCCH-UE-DRX-Offset-LCR
                                                       UE-DRX-Offset-LCR,
   iE-Extensions
                               ProtocolExtensionContainer { { HS-SCCH-DRX-Information-LCR-ExtIEs} } OPTIONAL,
   . . .
HS-SCCH-DRX-Information-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional },
```

```
E-AGCH-DRX-Information-LCR ::= CHOICE {
    sameAsHS-SCCH
    e-AGCH-DRX-Parameters
                                E-AGCH-DRX-Parameters,
E-AGCH-DRX-Parameters ::= SEOUENCE {
    e-AGCH-UE-DRX-Cycle-LCR
                                                        UE-DRX-Cycle-LCR,
    e-AGCH-UE-Inactivity-Monitor-Threshold
                                                        E-AGCH-UE-Inactivity-Monitor-Threshold
                                                                                                         OPTIONAL,
    e-AGCH-UE-DRX-Offset-LCR
                                                        UE-DRX-Offset-LCR,
                                                        ProtocolExtensionContainer { { E-AGCH-DRX-Parameters-ExtIEs} } OPTIONAL,
   iE-Extensions
E-AGCH-DRX-Parameters-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UE-DRX-Cycle-LCR ::= ENUMERATED {v1, v2, v4, v8, v16, v32, v64,...}
    -- Unit subframe
UE-DRX-Offset-LCR ::= INTEGER (0..63)
   -- Unit subframe
Inactivity-Threshold-for-UE-DRX-Cycle-LCR ::= ENUMERATED {v1, v2, v4, v8, v16, v32, v64,...}
    -- Unit subframe
Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext ::= ENUMERATED {v128, v256, v512,...}
E-AGCH-UE-Inactivity-Monitor-Threshold ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity,...}
    -- Unit subframe
ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR ::= SEQUENCE
    enabling-Delay
                                                Enabling-Delay
                                                                                        OPTIONAL,
    dRX-Information-to-Modify-LCR
                                                DRX-Information-to-Modify-LCR
                                                                                        OPTIONAL,
                                                ProtocolExtensionContainer { { ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR-ExtIEs }
    iE-Extensions
               OPTIONAL,
ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                                                                                                  PRESENCE optional },
    { ID id-Enabling-Delay-Ext-LCR
                                        CRITICALITY ignore EXTENSION Enabling-Delay-Ext-LCR
    . . .
DRX-Information-to-Modify-LCR ::= CHOICE {
    modify
                    DRX-Information-to-Modify-Items-LCR,
    deactivate
                    NULL,
DRX-Information-to-Modify-Items-LCR ::= SEQUENCE {
```

```
hS-SCCH-DRX-Information-LCR
                                             HS-SCCH-DRX-Information-LCR
                                                                                OPTIONAL,
   e-AGCH-DRX-Information-LCR
                                             E-AGCH-DRX-Information-LCR
                                                                                OPTIONAL.
   iE-Extensions
                                             ProtocolExtensionContainer {
                                                                         {DRX-Information-to-Modify-Items-LCR-ExtIEs} } OPTIONAL,
DRX-Information-to-Modify-Items-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ContinuousPacketConnectivity-DRX-Information-ResponseLCR ::= SEQUENCE {
    enabling-Delay
                                         Enabling-Delay
                                                                                OPTIONAL,
   hS-SCCH-DRX-Information-ResponseLCR
                                         HS-SCCH-DRX-Information-ResponseLCR
                                                                                OPTIONAL,
   e-AGCH-DRX-Information-ResponseLCR
                                         E-AGCH-DRX-Information-ResponseLCR
                                                                                OPTIONAL,
                                         ProtocolExtensionContainer { { ContinuousPacketConnectivity-DRX-Information-ResponseLCR-ExtIEs } }
   iE-Extensions
       OPTIONAL,
    . . .
ContinuousPacketConnectivity-DRX-Information-ResponseLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Enabling-Delay-Ext-LCR
                                     CRITICALITY ignore EXTENSION Enabling-Delay-Ext-LCR
                                                                                            PRESENCE optional },
    . . .
HS-SCCH-DRX-Information-ResponseLCR ::= SEQUENCE
    hS-SCCH-UE-DRX-Cycle-LCR
                                                            UE-DRX-Cycle-LCR
                                                                                   OPTIONAL,
   hS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR
                                                            Inactivity-Threshold-for-UE-DRX-Cycle-LCR
                                                                                                                  OPTIONAL,
   hS-SCCH-UE-DRX-Offset-LCR
                                                            UE-DRX-Offset-LCR
                                                                                   OPTIONAL,
   iE-Extensions
                                  ProtocolExtensionContainer { { HS-SCCH-DRX-Information-ResponseLCR-ExtIEs} } OPTIONAL,
HS-SCCH-DRX-Information-ResponseLCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional },
    . . .
E-AGCH-DRX-Information-ResponseLCR ::= CHOICE {
    sameAsHS-SCCH
                                      NULL,
                                     E-AGCH-DRX-Parameters-Response,
    e-AGCH-DRX-Parameters-Response
E-AGCH-DRX-Parameters-Response ::= SEOUENCE
   e-AGCH-UE-DRX-Cycle-LCR
                                                 UE-DRX-Cycle-LCR
                                                                                       OPTIONAL,
    e-AGCH-UE-Inactivity-Monitor-Threshold
                                                 E-AGCH-UE-Inactivity-Monitor-Threshold OPTIONAL,
   e-AGCH-UE-DRX-Offset-LCR
                                                 UE-DRX-Offset-LCR
                                                                                       OPTIONAL,
                                                 ProtocolExtensionContainer { { E-AGCH-DRX-Parameters-Response-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
E-AGCH-DRX-Parameters-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DATA-ID ::= INTEGER (0..3)
DCH-ID ::= INTEGER (0..255)
DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem
DCH-FDD-InformationItem ::= SEQUENCE {
   payloadCRC-PresenceIndicator
                                    PayloadCRC-PresenceIndicator,
   ul-FP-Mode
                                    UL-FP-Mode,
   toAWS
                                    ToAWS,
   TOAWE
                                    ToAWE,
   dCH-SpecificInformationList
                                    DCH-Specific-FDD-InformationList,
                                    ProtocolExtensionContainer { { DCH-FDD-InformationItem-ExtIEs} } 
   iE-Extensions
                                                                                                          OPTIONAL,
   . . .
DCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-TnlOos
                                    CRITICALITY ignore
                                                          EXTENSION TnlOos
                                                                                PRESENCE optional
   . . .
DCH-Specific-FDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item
DCH-Specific-FDD-Item ::=
                        SEQUENCE {
   dCH-ID
                                    DCH-ID,
   ul-TransportFormatSet
                                    TransportFormatSet,
   dl-TransportFormatSet
                                    TransportFormatSet,
   allocationRetentionPriority
                                    AllocationRetentionPriority,
   frameHandlingPriority
                                    FrameHandlingPriority,
   gE-Selector
                                    OE-Selector,
                                    ProtocolExtensionContainer { { DCH-Specific-FDD-Item-ExtIEs} }
   iE-Extensions
                                                                                                          OPTIONAL,
DCH-Specific-FDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional },
   . . .
DCH-Indicator-For-E-DCH-HSDPA-Operation ::= ENUMERATED {
   dch-not-present
DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem
```

```
DCH-InformationResponseItem ::= SEQUENCE {
   dCH-ID
                                           DCH-ID.
   bindingID
                                           BindingID
                                                              OPTIONAL,
   transportLayerAddress
                                           TransportLayerAddress OPTIONAL,
                                           iE-Extensions
                                                                                                               OPTIONAL,
DCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional
FDD only
   . . .
DCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-TDD-InformationItem
DCH-TDD-InformationItem ::= SEQUENCE {
   payloadCRC-PresenceIndicator
                                 PayloadCRC-PresenceIndicator,
   ul-FP-Mode
                                UL-FP-Mode,
   toAWS
                                ToAWS,
   toAWE
                                ToAWE,
   dCH-SpecificInformationList
                                DCH-Specific-TDD-InformationList,
   iE-Extensions
                                    ProtocolExtensionContainer { { DCH-TDD-InformationItem-ExtIEs} }
                                                                                                   OPTIONAL,
DCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-TnlOos
                                CRITICALITY ignore
                                                    EXTENSION TnlOos
                                                                        PRESENCE optional },
DCH-Specific-TDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item
DCH-Specific-TDD-Item ::= SEQUENCE {
   dCH-ID
                                    DCH-ID.
   ul-CCTrCH-ID
                                    CCTrCH-ID,
   dl-CCTrCH-ID
                                    CCTrCH-ID,
   ul-TransportFormatSet
                                    TransportFormatSet,
   dl-TransportFormatSet
                                    TransportFormatSet,
   allocationRetentionPriority
                                    AllocationRetentionPriority,
   frameHandlingPriority
                                    FrameHandlingPriority,
   qE-Selector
                                    QE-Selector
                                                              OPTIONAL,
   -- This IE shall be present if DCH is part of set of Coordinated DCHs
                                    iE-Extensions
                                                                                                   OPTIONAL,
DCH-Specific-TDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional },
FDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifyItem
```

```
FDD-DCHs-to-ModifyItem
                       ::= SEQUENCE
    ul-FP-Mode
                                       UL-FP-Mode
                                                       OPTIONAL.
    toAWS
                                       ToAWS
                                                       OPTIONAL,
    toAWE
                                       TOAWE
                                                       OPTIONAL.
    transportBearerRequestIndicator
                                       TransportBearerRequestIndicator,
    dCH-SpecificInformationList
                                       DCH-ModifySpecificInformation-FDD,
                                       ProtocolExtensionContainer { { FDD-DCHs-to-ModifyItem-ExtIEs} }
    iE-Extensions
                                                                                                                      OPTIONAL,
FDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlOos
                                       CRITICALITY ignore
                                                               EXTENSION TnlOos
                                                                                       PRESENCE optional },
    . . .
DCH-ModifySpecificInformation-FDD::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-FDD
DCH-ModifySpecificItem-FDD::=
                               SEQUENCE {
    dCH-ID
                                                   DCH-ID,
    ul-TransportFormatSet
                                                   TransportFormatSet
                                                                              OPTIONAL,
    dl-TransportFormatSet
                                                   TransportFormatSet
                                                                              OPTIONAL,
    allocationRetentionPriority
                                                   AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                                   FrameHandlingPriority
                                                                              OPTIONAL,
                                                   iE-Extensions
                                                                                                                             OPTIONAL,
    . . .
DCH-ModifySpecificItem-FDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-Unidirectional-DCH-Indicator
                                                       CRITICALITY reject
                                                                              EXTENSION Unidirectional-DCH-Indicator
                                                                                                                             PRESENCE optional },
    . . .
TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifyItem-TDD
DCH-ModifyItem-TDD ::= SEQUENCE {
    ul-FP-Mode
                                       UL-FP-Mode
                                                       OPTIONAL,
                                       ToAWS
                                                       OPTIONAL,
    toAWS
    toAWE
                                       ToAWE
                                                       OPTIONAL,
    transportBearerRequestIndicator
                                       TransportBearerRequestIndicator,
                                       DCH-ModifySpecificInformation-TDD,
    dCH-SpecificInformationList
    iE-Extensions
                                       ProtocolExtensionContainer { { TDD-DCHs-to-ModifyItem-ExtIEs} }
                                                                                                                             OPTIONAL,
TDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlQos
                                       CRITICALITY ignore
                                                               EXTENSION TnlQos
                                                                                       PRESENCE optional },
    . . .
DCH-ModifySpecificInformation-TDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-TDD
DCH-ModifySpecificItem-TDD ::= SEQUENCE {
```

```
dCH-ID
                                                  DCH-ID,
   ul-CCTrCH-ID
                                                  CCTrCH-ID
                                                                             OPTIONAL,
   dl-CCTrCH-ID
                                                  CCTrCH-ID
                                                                             OPTIONAL.
   ul-TransportFormatSet
                                                  TransportFormatSet
                                                                             OPTIONAL,
    dl-TransportFormatSet
                                                  TransportFormatSet
                                                                             OPTIONAL,
   allocationRetentionPriority
                                                  AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                                  FrameHandlingPriority
                                                                             OPTIONAL,
                                                  iE-Extensions
                                                                                                                                   OPTIONAL,
DCH-ModifySpecificItem-TDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DedicatedChannelsCapacityConsumptionLaw ::= SEQUENCE ( SIZE(1..maxNrOfSF) ) OF
   SEQUENCE {
       dl-Cost-1
                       INTEGER (0..65535),
       dl-Cost-2
                       INTEGER (0..65535),
       ul-Cost-1
                       INTEGER (0..65535),
       ul-Cost-2
                       INTEGER (0..65535),
                           ProtocolExtensionContainer { { DedicatedChannelsCapacityConsumptionLaw-ExtIEs } }
       iE-Extensions
                                                                                                                    OPTIONAL,
DedicatedChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementType ::= ENUMERATED {
   sir,
   sir-error,
   transmitted-code-power,
   rx-timing-deviation,
   round-trip-time,
    rx-timing-deviation-LCR,
    angle-Of-Arrival-LCR,
   hs-sich-quality,
   best-Cell-Portions,
   rx-timing-deviation-768,
    rx-timing-deviation-384-extended
DedicatedMeasurementValue ::= CHOICE
   sIR-Value
                                   SIR-Value,
   sIR-ErrorValue
                                   SIR-Error-Value,
   transmittedCodePowerValue
                                      Transmitted-Code-Power-Value,
                                      RSCP-Value,
    rxTimingDeviationValue
                                      Rx-Timing-Deviation-Value,
   roundTripTime
                                      Round-Trip-Time-Value,
    . . . ,
```

```
Extension-DedicatedMeasurementValue
    extension-DedicatedMeasurementValue
Extension-DedicatedMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-DedicatedMeasurementValueIE }}
Extension-DedicatedMeasurementValueIE NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory
} |
    { ID id-Angle-Of-Arrival-Value-LCR
                                                                                                                          PRESENCE mandatory
                                              CRITICALITY reject TYPE Angle-Of-Arrival-Value-LCR
} |
     ID id-HS-SICH-Reception-Quality
                                                                                                           PRESENCE mandatory } |
                                              CRITICALITY reject TYPE HS-SICH-Reception-Quality-Value
    { ID id-Best-Cell-Portions-Value
                                              CRITICALITY reject TYPE Best-Cell-Portions-Value
                                                                                                                          PRESENCE mandatory
} |
     ID id-Rx-Timing-Deviation-Value-768
                                              CRITICALITY reject TYPE Rx-Timing-Deviation-Value-768
                                                                                                                   PRESENCE mandatory } |
     ID id-Rx-Timing-Deviation-Value-384-ext
                                             CRITICALITY reject TYPE Rx-Timing-Deviation-Value-384-ext
                                                                                                                   PRESENCE mandatory } |
     ID id-Extended-Round-Trip-Time-Value
                                              CRITICALITY reject TYPE Extended-Round-Trip-Time-Value
                                                                                                                   PRESENCE mandatory },
DedicatedMeasurementValueInformation ::= CHOICE {
                              DedicatedMeasurementAvailable,
    measurementAvailable
                              DedicatedMeasurementnotAvailable
    measurementnotAvailable
DedicatedMeasurementAvailable::= SEQUENCE
    dedicatedmeasurementValue
                                  DedicatedMeasurementValue,
    CFN
                                                             OPTIONAL,
                                  ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs} }
    ie-Extensions
                                                                                                                   OPTIONAL,
DedicatedMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
DedicatedMeasurementnotAvailable ::= NULL
DelayedActivation ::= CHOICE {
                          CFN,
    separate-indication
DelayedActivationUpdate ::= CHOICE {
    activate
                   Activate-Info,
    deactivate
                   Deactivate-Info
```

```
Activate-Info ::= SEQUENCE {
   activation-type
                      Execution-Type,
   initial-dl-tx-power
                      DL-Power.
   firstRLS-Indicator
                      FirstRLS-Indicator
                                                                       OPTIONAL, --FDD Only
   propagation-delay
                      PropagationDelay
                                                                       OPTIONAL, --FDD Only
                      ProtocolExtensionContainer { { Activate-Info-ExtIEs} }
   iE-Extensions
                                                                       OPTIONAL,
Activate-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
Deactivate-Info ::= SEQUENCE {
   deactivation-type
                      Execution-Type,
                      iE-Extensions
                                                                          OPTIONAL,
Deactivate-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
Execution-Type ::= CHOICE {
   synchronised
                CFN,
   unsynchronised NULL
                  ::= INTEGER (0..30)
-- Unit dB, Step 0.1 dB, Range 0..3 dB.
DGANSSCorrections ::= SEQUENCE {
   dGANSS-ReferenceTime
                                INTEGER (0..119),
   dGANSS-Information
                                DGANSS-Information,
   ie-Extensions
                                OPTIONAL,
DGANSSCorrections-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
DGANSS-Corrections-Reg ::= SEQUENCE {
   dGANSS-Signal-ID
                                BIT STRING (SIZE (8)),
                                ProtocolExtensionContainer { { DGANSS-Corrections-Req-ExtIEs } }
   ie-Extensions
                                                                                              OPTIONAL,
```

```
DGANSS-Corrections-Req-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
                                                                                             optional},
    {ID id-GANSS-ID
                               CRITICALITY ignore EXTENSION GANSS-ID
                                                                                  PRESENCE
DGANSS-Information ::= SEQUENCE (SIZE (1..maxSgnType)) OF DGANSS-InformationItem
DGANSS-InformationItem ::= SEQUENCE {
   gANSS-SignalId
                                      GANSS-Signal-ID
                                                                                                                OPTIONAL,
   qANSS-StatusHealth
                                      GANSS-StatusHealth,
-- The following IE shall be present if the Status Health IE value is not equal to 'no data' or 'invalid data'
   dGANSS-SignalInformation
                                      DGANSS-SignalInformation
                                                                                                                OPTIONAL,
   ie-Extensions
                                      ProtocolExtensionContainer { { DGANSS-InformationItem-ExtIEs } }
                                                                                                                OPTIONAL,
    . . .
DGANSS-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DGANSS-SignalInformation ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF DGANSS-SignalInformationItem
DGANSS-SignalInformationItem ::= SEQUENCE {
   satId
                                      INTEGER (0..63),
   qANSS-iod
                                      BIT STRING (SIZE (10)),
   udre
                                      UDRE,
                                      INTEGER (-2047..2047),
   ganss-prc
   ganss-rrc
                                      INTEGER (-127..127),
                                      ProtocolExtensionContainer { { DGANSS-SignalInformationItem-ExtIEs } }
   ie-Extensions
                                                                                                                OPTIONAL,
DGANSS-SignalInformationItem-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
DGANSSThreshold ::= SEQUENCE {
                                      PRCDeviation,
   pRCDeviation
                                      ie-Extensions
                                                                                                                OPTIONAL,
DGANSSThreshold-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DGPSCorrections ::= SEQUENCE {
         gpstow
         status-health
                                                                             GPS-Status-Health,
         satelliteinfo
                                                                              SAT-Info-DGPSCorrections,
                                                                              ie-Extensions
                                                                                                                                                                                                                                                                                 OPTIONAL,
DGPSCorrections-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DGPSThresholds ::= SEQUENCE {
         prcdeviation
                                                                          PRCDeviation,
         ie-Extensions
                                                                          OPTIONAL,
DGPSThresholds-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DiscardTimer ::= ENUMERATED
\{v20, v40, v60, v80, v100, v120, v140, v160, v180, v200, v250, v300, v400, v500, v750, v1000, v1250, v1500, v1750, v2000, v2500, v3000, v3500, v4000, v4500, v5000, v7500, v1000, versityControlField ::= ENUMERATED
            may,
            must,
            must-not,
DiversityMode ::= ENUMERATED {
             none,
             sTTD,
             closed-loop-mode1,
             not-used-closed-loop-mode2,
DL-DPCH-SlotFormat ::= INTEGER (0..16,...)
DL-DPCH-TimingAdjustment ::= ENUMERATED {
             timing-advance,
             timing-delay
```

```
DL-Timeslot-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationItem
DL-Timeslot-InformationItem ::= SEOUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    tFCI-Presence
                                            TFCI-Presence,
    dL-Code-Information
                                            TDD-DL-Code-Information,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Timeslot-InformationItem-ExtIEs} }
                                                                                                                          OPTIONAL,
DL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-TimeslotLCR-InformationItem
DL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
    tFCT-Presence
                                            TFCI-Presence,
    dL-Code-LCR-Information
                                            TDD-DL-Code-LCR-Information,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs} } 
                                                                                                                          OPTIONAL,
    . . .
DL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Initial-DL-Power-TimeslotLCR-InformationItem
                                                            CRITICALITY ignore
                                                                                  EXTENSION DL-Power
                                                                                                                          PRESENCE optional
                                                                                                                                                 } |
    -- Applicable to 1.28Mcps TDD only
    { ID id-Maximum-DL-Power-TimeslotLCR-InformationItem
                                                                                                                                                 } |
                                                            CRITICALITY ignore
                                                                                  EXTENSION DL-Power
                                                                                                                          PRESENCE optional
    -- Applicable to 1.28Mcps TDD only
    { ID id-Minimum-DL-Power-TimeslotLCR-InformationItem CRITICALITY ignore
                                                                                                                          PRESENCE optional
                                                                                 EXTENSION DL-Power
    -- Applicable to 1.28Mcps TDD only
DL-Timeslot768-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot768-InformationItem
DL-Timeslot768-InformationItem ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType768
                                            MidambleShiftAndBurstType768,
    tFCI-Presence
                                            TFCI-Presence,
    dL-Code-768-Information
                                            TDD-DL-Code-768-Information,
                                            ProtocolExtensionContainer { { DL-Timeslot768-InformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
DL-Timeslot768-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-FrameType ::= ENUMERATED
    typeA,
    typeB,
```

```
DL-or-Global-CapacityCredit ::= INTEGER (0..65535)
DL-Power ::= INTEGER (-350..150)
-- Value = DL-Power/10
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB
DLPowerAveragingWindowSize ::= INTEGER (1..60)
DL-PowerBalancing-Information ::= SEQUENCE {
    powerAdjustmentType
                                        PowerAdjustmentType,
    dLReferencePower
                                       DL-Power
                                                       OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
    dLReferencePowerList-DL-PC-Rqst
                                       DL-ReferencePowerInformationList
                                                                                OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
                                       MaxAdjustmentStep
    maxAdjustmentStep
                                                                OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
                                       AdjustmentPeriod
                                                                OPTIONAL,
    adjustmentPeriod
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
                                       ScaledAdjustmentRatio OPTIONAL,
    adjustmentRatio
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
                                        ProtocolExtensionContainer { { DL-PowerBalancing-Information-ExtIEs } } OPTIONAL,
    iE-Extensions
DL-PowerBalancing-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-ReferencePowerInformationList
                                       ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem
DL-ReferencePowerInformationItem ::= SEQUENCE {
   rL-ID
                               RL-ID,
    dl-Reference-Power
                               DL-Power,
    iE-Extensions
                                ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs} } OPTIONAL,
DL-ReferencePowerInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-PowerBalancing-ActivationIndicator ::= ENUMERATED {
    dL-PowerBalancing-Activated
DL-PowerBalancing-UpdatedIndicator ::= ENUMERATED
    dL-PowerBalancing-Updated
DL-ScramblingCode ::= INTEGER (0..15)
-- 0= Primary scrambling code of the cell, 1..15= Secondary scrambling code --
```

```
DL-TimeslotISCP ::= INTEGER (0..91)
DL-TimeslotISCPInfo ::= SEOUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-TimeslotISCPInfoItem
DL-TimeslotISCPInfoItem ::= SEQUENCE {
    timeSlot
                                TimeSlot,
    dL-TimeslotISCP
                                DL-TimeslotISCP.
    iE-Extensions
                                ProtocolExtensionContainer { {DL-TimeslotISCPInfoItem-ExtIEs} }
                                                                                                                         OPTIONAL,
DL-TimeslotISCPInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-TimeslotISCPInfoLCR ::= SEOUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-TimeslotISCPInfoItemLCR
DL-TimeslotISCPInfoItemLCR ::= SEQUENCE {
    timeSlotLCR
                                TimeSlotLCR,
    dL-TimeslotISCP
                                DL-TimeslotISCP.
                                ProtocolExtensionContainer { {DL-TimeslotISCPInfoItemLCR-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
DL-TimeslotISCPInfoItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-TPC-Pattern01Count ::= INTEGER (0..30,...)
DLTransmissionBranchLoadValue ::= INTEGER (0..101,...)
Downlink-Compressed-Mode-Method
                                   ::= ENUMERATED {
    not-Used-puncturing,
    sFdiv2.
    higher-layer-scheduling,
    . . .
DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-
ReconfRqst
DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst::= SEQUENCE {
    timeSlot
                                                TimeSlotLCR,
                                                MidambleShiftLCR,
    midambleShiftAndBurstType
    dl-HS-PDSCH-Codelist-LCR-PSCH-ReconfRqst
                                                    DL-HS-PDSCH-Codelist-LCR-PSCH-ReconfRgst,
    maxHSDSCH-HSSCCH-Power
                                                MaximumTransmissionPower
                                                                                             OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} }
       OPTIONAL,
    . . .
```

```
DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-HS-PDSCH-Codelist-LCR-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfHSPDSCHs)) OF TDD-ChannelisationCode
DPC-Mode ::= ENUMERATED {
    mode0,
   mode1,
DPCH-ID ::= INTEGER (0..239)
DPCH-ID768 ::= INTEGER (0..479)
DRX-Information ::= SEQUENCE {
    uE-DRX-Cycle
                                            UE-DRX-Cycle,
    inactivity-Threshold-for-UE-DRX-Cycle
                                                                     Inactivity-Threshold-for-UE-DRX-Cycle,
    inactivity-Threshold-for-UE-Grant-Monitoring
                                                                     Inactivity-Threshold-for-UE-Grant-Monitoring,
    uE-DRX-Grant-Monitoring
                                            UE-DRX-Grant-Monitoring,
    iE-Extensions
                                            ProtocolExtensionContainer { {DRX-Information-ExtIEs} } OPTIONAL,
DRX-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DRX-Information-to-Modify ::= CHOICE {
                    DRX-Information-to-Modify-Items,
    modify
    deactivate
                    NULL,
    . . .
DRX-Information-to-Modify-Items ::= SEQUENCE {
    uE-DRX-Cycle
                                                                     UE-DRX-Cycle
    OPTIONAL,
    inactivity-Threshold-for-UE-DRX-Cycle
                                                                     Inactivity-Threshold-for-UE-DRX-Cycle
                                                                                                                                         OPTIONAL,
    inactivity-Threshold-for-UE-Grant-Monitoring
                                                                     Inactivity-Threshold-for-UE-Grant-Monitoring
                                                                                                                          OPTIONAL,
    uE-DRX-Grant-Monitoring
                                                                     UE-DRX-Grant-Monitoring
    OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { {DRX-Information-to-Modify-Items-ExtIEs} } OPTIONAL,
DRX-Information-to-Modify-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DRX-Interruption-by-HS-DSCH ::= ENUMERATED {
    drx-Interruption-Configured,
    drx-Interruption-Not-Configured,
```

```
DSCH-ID ::= INTEGER (0..255)
DSCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-InformationResponseItem
DSCH-InformationResponseItem ::= SEQUENCE {
   dscH-ID
                                                DSCH-ID.
   bindingID
                                                BindingID
                                                                          OPTIONAL,
   transportLayerAddress
                                                TransportLayerAddress
                                                                          OPTIONAL,
                                                iE-Extensions
                                                                                                                              OPTIONAL,
DSCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-TDD-InformationItem
DSCH-TDD-InformationItem ::= SEQUENCE {
   dSCH-ID
                                         DSCH-ID,
   cCTrCH-ID
                                         CCTrCH-ID.
   transportFormatSet
                                         TransportFormatSet,
   allocationRetentionPriority
                                         AllocationRetentionPriority,
   frameHandlingPriority
                                         FrameHandlingPriority,
   toAWS
                                         ToAWS,
   toAWE
   iE-Extensions
                                         ProtocolExtensionContainer { { DSCH-TDD-InformationItem-ExtIEs} } 
                                                                                                                OPTIONAL,
   . . .
DSCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-bindingID
                                     CRITICALITY ignore
                                                           EXTENSION BindingID
                                                                                                            PRESENCE optional
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                     CRITICALITY ignore
                                                           EXTENSION
                                                                      TransportLayerAddress
                                                                                                            PRESENCE optional
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-TnlOos
                                     CRITICALITY ignore
                                                                                                            PRESENCE optional },
                                                           EXTENSION TnlOos
   . . .
DsField ::= BIT STRING (SIZE (8))
DTX-Cycle-2ms-Items ::= SEQUENCE
   uE-DTX-Cycle1-2ms
                                 UE-DTX-Cycle1-2ms,
   uE-DTX-Cycle2-2ms
                                 UE-DTX-Cycle2-2ms,
   mAC-DTX-Cycle-2ms
                                 MAC-DTX-Cycle-2ms,
   iE-Extensions
                                            OPTIONAL,
   . . .
DTX-Cycle-2ms-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DTX-Cycle-2ms-to-Modify-Items ::= SEQUENCE {
   uE-DTX-Cycle1-2ms
                       UE-DTX-Cycle1-2ms,
   uE-DTX-Cycle2-2ms
                               UE-DTX-Cycle2-2ms,
                               MAC-DTX-Cycle-2ms,
   mAC-DTX-Cycle-2ms
                                           iE-Extensions
                                                                                                                         OPTIONAL.
DTX-Cycle-2ms-to-Modify-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DTX-Cycle-10ms-Items ::= SEQUENCE {
   uE-DTX-Cycle1-10ms
                                UE-DTX-Cycle1-10ms,
   uE-DTX-Cycle2-10ms
                                UE-DTX-Cycle2-10ms,
   mAC-DTX-Cycle-10ms
                                MAC-DTX-Cycle-10ms,
                                           iE-Extensions
                                                                                                                   OPTIONAL,
DTX-Cycle-10ms-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DTX-Cycle-10ms-to-Modify-Items ::= SEQUENCE {
   uE-DTX-Cycle1-10ms
                               UE-DTX-Cycle1-10ms,
   uE-DTX-Cycle2-10ms
                               UE-DTX-Cycle2-10ms,
   mAC-DTX-Cycle-10ms
                                MAC-DTX-Cycle-10ms,
                                           ProtocolExtensionContainer { { DTX-Cycle-10ms-to-Modify-Items-ExtIEs} } }
   iE-Extensions
                                                                                                                         OPTIONAL,
DTX-Cycle-10ms-to-Modify-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DTX-Information ::= SEQUENCE {
   e-DCH-TTI-Length
                                   E-DCH-TTI-Length,
   inactivity-Threshold-for-UE-DTX-Cycle2
                                                      Inactivity-Threshold-for-UE-DTX-Cycle2,
   uE-DTX-Long-Preamble
                                   UE-DTX-Long-Preamble,
   mAC-Inactivity-Threshold
                                       MAC-Inactivity-Threshold
   cQI-DTX-Timer
                            CQI-DTX-Timer,
   uE-DPCCH-burst1
                            UE-DPCCH-burst1,
   uE-DPCCH-burst2
                            UE-DPCCH-burst2,
   iE-Extensions
                            ProtocolExtensionContainer { {DTX-Information-ExtIEs} } OPTIONAL,
DTX-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
```

OPTIONAL,

```
DTX-Information-to-Modify ::= CHOICE {
    modify
                   DTX-Information-to-Modify-Items,
    deactivate
DTX-Information-to-Modify-Items ::= SEQUENCE {
    e-DCH-TTI-Length-to-Modify
                                  E-DCH-TTI-Length-to-Modify
                                                                    OPTIONAL,
    inactivity-Threshold-for-UE-DTX-Cycle2
                                                         Inactivity-Threshold-for-UE-DTX-Cycle2
    uE-DTX-Long-Preamble
                                  UE-DTX-Long-Preamble
                                                                    OPTIONAL,
    mAC-Inactivity-Threshold
                                     MAC-Inactivity-Threshold
                                                                           OPTIONAL,
    cOI-DTX-Timer
                                  COI-DTX-Timer
                                                                    OPTIONAL,
    uE-DPCCH-burst1
                                  UE-DPCCH-burst1
                                                                    OPTIONAL,
    uE-DPCCH-burst2
                                  UE-DPCCH-burst2
                                                                    OPTIONAL,
    iE-Extensions
                                  ProtocolExtensionContainer { {DTX-Information-to-Modify-Items-ExtIEs} } OPTIONAL,
DTX-Information-to-Modify-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DwPCH-Power ::= INTEGER (-150..400,...)
-- DwPCH-power = power * 10
-- If power <= -15 DwPCH shall be set to -150
-- If power >= 40 DwPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
__ ______
-- -----
E-AGCH-Table-Choice ::= ENUMERATED{table16B, table16B-1, ...}
E-AGCH-FDD-Code-Information ::= CHOICE {
                          E-AGCH-FDD-Code-List,
    replace
    remove
                          NULL,
    . . .
E-AGCH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfE-AGCHs)) OF FDD-DL-ChannelisationCodeNumber
E-AI-Capability ::= ENUMERATED
    e-AI-capable,
    e-AI-non-capable
E-AI-Indicator ::= BOOLEAN
E-DCH-Capability ::= ENUMERATED {
```

```
e-DCH-capable,
    e-DCH-non-capable
E-DCHCapacityConsumptionLaw ::= SEQUENCE {
       e-DCH-SF-allocation E-DCH-SF-allocation,
       dl-Cost-1 INTEGER (0..65535)
                                                                                                                     OPTIONAL,
       dl-Cost-2
                            INTEGER (0..65535)
                                                                                                                     OPTIONAL,
       iE-Extensions
                          ProtocolExtensionContainer { { E-DCHCapacityConsumptionLaw-ExtIEs } }
                                                                                                                     OPTIONAL,
    . . .
E-DCHCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-CapacityConsumptionLaw ::= SEQUENCE {
       ul-Cost
                INTEGER (0..65535),
       dl-Cost
                          INTEGER (0..65535)
                                                                                                                 OPTIONAL,
                               ProtocolExtensionContainer { { E-DCH-TDD-CapacityConsumptionLaw-ExtIEs } }
       iE-Extensions
                                                                                                                     OPTIONAL,
E-DCH-TDD-CapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-SF-allocation ::= SEQUENCE ( SIZE(1..maxNrOfCombEDPDCH) ) OF
    SEQUENCE {
       ul-Cost-1
                       INTEGER (0..65535),
       ul-Cost-2
                      INTEGER (0..65535),
                          ProtocolExtensionContainer { { E-DCH-SF-allocation-ExtIEs } }
       iE-Extensions
                                                                                             OPTIONAL,
    . . .
E-DCH-SF-allocation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TTI2ms-Capability ::= BOOLEAN
-- True = TTI 10ms and 2ms supported for E-DCH False = only TTI 10ms supported for E-DCH
E-DCH-SF-Capability ::= ENUMERATED {
    sf64,
    sf32.
    sf16,
    sf8,
    sf4,
    sf4x2.
    sf2x2,
    sf4x2-and-sf2x2,
```

```
E-DCH-HARQ-Combining-Capability ::= ENUMERATED {
    iR-Combining-capable,
    chase-Combining-capable,
    iR-and-Chase-Combining-capable
E-DCH-DDI-Value ::= INTEGER (0..62)
E-DCH-FDD-DL-Control-Channel-Information ::= SEQUENCE {
    e-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code
                                                    DL-ScramblingCode
           OPTIONAL,
    e-AGCH-Channelisation-Code
                                                     FDD-DL-ChannelisationCodeNumber
           OPTIONAL.
    primary-e-RNTI
                                                     E-RNTI
           OPTIONAL,
    secondary-e-RNTI
                                                     E-RNTI
           OPTIONAL,
    e-RGCH-E-HICH-Channelisation-Code
                                                     FDD-DL-ChannelisationCodeNumber
           OPTIONAL,
    e-RGCH-Signature-Sequence
                                                     E-RGCH-Signature-Sequence
           OPTIONAL,
    e-HICH-Signature-Sequence
                                                     E-HICH-Signature-Sequence
           OPTIONAL,
    serving-Grant-Value
                                                     E-Serving-Grant-Value
           OPTIONAL,
    primary-Secondary-Grant-Selector
                                                     E-Primary-Secondary-Grant-Selector
           OPTIONAL,
    e-RGCH-Release-Indicator
                                                     E-RGCH-Release-Indicator
                OPTIONAL,
                                                     ProtocolExtensionContainer { { E-DCH-FDD-DL-Control-Channel-Information-ExtIEs} }
    iE-Extensions
    OPTIONAL,
E-DCH-FDD-DL-Control-Channel-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Default-Serving-Grant-in-DTX-Cycle2
                                                    CRITICALITY ignore
                                                                             EXTENSION E-Serving-Grant-Value
                                                                                                                                 PRESENCE optional },
E-DCH-FDD-Information ::= SEQUENCE {
    e-DCH-MACdFlows-Information
                                                     E-DCH-MACdFlows-Information,
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                     HARO-Process-Allocation-2ms-EDCH
           OPTIONAL,
    e-DCH-Maximum-Bitrate
                                                     E-DCH-Maximum-Bitrate
           OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                     E-DCH-Processing-Overload-Level
           OPTIONAL,
                                                     E-DCH-Reference-Power-Offset
    e-DCH-Reference-Power-Offset
           OPTIONAL,
                                                     ProtocolExtensionContainer { { E-DCH-FDD-Information-ExtIEs} }
    iE-Extensions
           OPTIONAL,
    . . .
```

```
E-DCH-FDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-PowerOffset-for-SchedulingInfo
                                                        CRITICALITY ignore EXTENSION E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                                        PRESENCE
optional}|
    { ID id-SixteenOAM-UL-Operation-Indicator
                                                        CRITICALITY reject EXTENSION
                                                                                        SixteenOAM-UL-Operation-Indicator
    PRESENCE optional } |
    { ID id-E-AGCH-Table-Choice
                                                        CRITICALITY ignore EXTENSION
                                                                                        E-AGCH-Table-Choice
                                                                                                                                        PRESENCE
conditional }.
    -- The IE shall be present if the SixteenOAM UL Operation Indicator IE is set to 'Activate'--
E-DCH-FDD-Information-Response ::= SEQUENCE {
    e-DCH-MACdFlow-Specific-InformationResp
                                                    E-DCH-MACdFlow-Specific-InformationResp
            OPTIONAL,
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
                            OPTIONAL.
                                                    ProtocolExtensionContainer { { E-DCH-FDD-Information-Response-ExtIEs } }
    iE-Extensions
       OPTIONAL,
    . . .
E-DCH-FDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-FDD-Information-to-Modify ::= SEQUENCE {
    e-DCH-MACdFlow-Specific-Info-to-Modify
                                                    E-DCH-MACdFlow-Specific-InfoList-to-Modify
                            OPTIONAL,
    hARQ-Process-Allocation-Scheduled-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
                            OPTIONAL,
    e-DCH-Maximum-Bitrate
                                                    E-DCH-Maximum-Bitrate
                            OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                    E-DCH-Processing-Overload-Level
                            OPTIONAL,
    e-DCH-Reference-Power-Offset
                                                    E-DCH-Reference-Power-Offset
           OPTIONAL,
    mACeReset-Indicator
                                                    MACeReset-Indicator
           OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-FDD-Information-to-Modify-ExtIEs} } 
        OPTIONAL,
E-DCH-FDD-Information-to-Modify-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-PowerOffset-for-SchedulingInfo
                                                        CRITICALITY ignore EXTENSION E-DCH-PowerOffset-for-SchedulingInfo
                PRESENCE optional |
    { ID id-SixteenQAM-UL-Operation-Indicator
                                                        CRITICALITY reject EXTENSION
                                                                                        SixteenQAM-UL-Operation-Indicator
                    PRESENCE optional |
    { ID id-E-DCH-MACdPDUSizeFormat
                                                        CRITICALITY reject EXTENSION
                                                                                        E-DCH-MACdPDUSizeFormat
                    PRESENCE optional |
    { ID id-E-DCH-DL-Control-Channel-Grant-Information CRITICALITY ignore EXTENSION
                                                                                        E-DCH-DL-Control-Channel-Grant-Information
                PRESENCE optional |
    { ID id-E-AGCH-Table-Choice
                                                        CRITICALITY ignore EXTENSION E-AGCH-Table-Choice
                    PRESENCE conditional },
```

```
-- The IE shall be present if the SixteenQAM UL Operation Indicator IE is set to 'Activate'--
E-DCH-FDD-Update-Information ::= SEQUENCE
    e-DCH-MACdFlow-Specific-UpdateInformation
                                                    E-DCH-MACdFlow-Specific-UpdateInformation
            OPTIONAL,
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
                            OPTIONAL.
                                                    ProtocolExtensionContainer { { E-DCH-FDD-Update-Information-ExtIEs } }
    iE-Extensions
       OPTIONAL,
    . . .
E-DCH-FDD-Update-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-DL-Control-Channel-Change-Information
                                                                CRITICALITY ignore EXTENSION E-DCH-DL-Control-Channel-Change-Information
        PRESENCE optional },
E-DCH-MACdFlow-Specific-UpdateInformation ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-UpdateInformation-Item
E-DCH-MACdFlow-Specific-UpdateInformation-Item ::= SEOUENCE {
    e-DCH-MACdFlow-ID
                                                    E-DCH-MACdFlow-ID,
    hARO-Process-Allocation-NonSched-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
                            OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-UpdateInformation-Item-ExtIEs} }
    OPTIONAL,
E-DCH-MACdFlow-Specific-UpdateInformation-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-DL-Control-Channel-Change-Information ::= SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF E-DCH-DL-Control-Channel-Change-Information-Item
E-DCH-DL-Control-Channel-Change-Information-Item ::= SEQUENCE {
    e-DCH-RL-ID
                                            RL-ID,
                                            ProtocolExtensionContainer { { E-DCH-DL-Control-Channel-Change-Information-Item-ExtIEs} } OPTIONAL,
    iE-Extensions
E-DCH-DL-Control-Channel-Change-Information-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-DL-Control-Channel-Grant-Information ::= SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF E-DCH-DL-Control-Channel-Grant-Information-Item
E-DCH-DL-Control-Channel-Grant-Information-Item ::= SEQUENCE {
    e-DCH-RL-ID
    iE-Extensions
                                            ProtocolExtensionContainer { { E-DCH-DL-Control-Channel-Grant-Information-Item-ExtIEs} }
                                                                                                                                        OPTIONAL,
    . . .
```

```
E-DCH-DL-Control-Channel-Grant-Information-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-Grant-Type-Information ::= CHOICE {
    e-DCH-Non-Scheduled-Transmission-Grant
                                                E-DCH-Non-Scheduled-Transmission-Grant-Items,
    e-DCH-Scheduled-Transmission-Grant
                                                NULL.
E-DCH-LogicalChannelInformation ::= SEOUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelInformationItem
E-DCH-LogicalChannelInformationItem ::= SEQUENCE {
    logicalChannelId
                                    LogicalChannelID,
    schedulingPriorityIndicator
                                    SchedulingPriorityIndicator,
    schedulingInformation
                                    SchedulingInformation,
                                    MACesGuaranteedBitRate
    mACesGuaranteedBitRate
                                                                OPTIONAL,
    e-DCH-DDI-Value
                                    E-DCH-DDI-Value,
    mACd-PDU-Size-List
                                    E-DCH-MACdPDU-SizeList,
                                    ProtocolExtensionContainer { { E-DCH-LogicalChannelInformationItem-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
E-DCH-LogicalChannelInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-MaximumMACdPDU-SizeExtended
                                                                                                          PRESENCE optional } |
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                MAC-PDU-SizeExtended
     ID id-MACes-Maximum-Bitrate-LCR
                                            CRITICALITY ignore
                                                                     EXTENSION
                                                                                MACes-Maximum-Bitrate-LCR
                                                                                                                          PRESENCE optional }, --
1.28Mcps TDD only
E-DCH-Maximum-Bitrate ::= INTEGER (0..5742,...,5743..11498)
E-DCH-PowerOffset-for-SchedulingInfo ::= INTEGER (0.. maxNrOfEDCH-HARO-PO-OUANTSTEPs)
E-DCH-Processing-Overload-Level ::= INTEGER (0..10,...)
E-DCH-Reference-Power-Offset ::= INTEGER (0.. maxNrOfEDCH-HARO-PO-QUANTSTEPs)
E-DCH-MACdPDU-SizeList ::= SEQUENCE (SIZE (1.. maxNrOfMACdPDUSize)) OF E-DCH-MACdPDU-SizeListItem
E-DCH-MACdPDU-SizeListItem ::= SEQUENCE {
    mACdPDU-Size
                                    MACdPDU-Size,
                                    ProtocolExtensionContainer { { E-DCH-MACdPDU-SizeListItem-ExtIEs } }
    iE-Extensions
                                                                                                                         OPTIONAL,
E-DCH-MACdPDU-SizeListItem-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-MACdPDU-SizeCapability ::= ENUMERATED {
    fixedSizeCapable,
```

```
flexibleSizeCapable
E-DCH-MACdPDUSizeFormat ::= ENUMERATED {
    fixedMACdPDU-Size.
    flexibleMACdPDU-Size
E-DCH-LogicalChannelToModify ::= SEQUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelToModifyItem
E-DCH-LogicalChannelToModifyItem ::= SEQUENCE {
    logicalChannelId
                                   LogicalChannelID,
    schedulingPriorityIndicator
                                   SchedulingPriorityIndicator
                                                                   OPTIONAL.
    schedulingInformation
                                   SchedulingInformation
                                                               OPTIONAL,
    mACesGuaranteedBitRate
                                   MACesGuaranteedBitRate
                                                               OPTIONAL,
    e-DCH-DDI-Value
                                   E-DCH-DDI-Value
                                                                   OPTIONAL,
    mACd-PDU-Size-List
                                   E-DCH-MACdPDU-SizeToModifyList,
                                   ProtocolExtensionContainer { { E-DCH-LogicalChannelToModifyItem-ExtIEs } }
    iE-Extensions
                                                                                                                               OPTIONAL,
E-DCH-LogicalChannelToModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-MaximumMACdPDU-SizeExtended
                                           CRITICALITY reject
                                                                   EXTENSION MAC-PDU-SizeExtended
                                                                                                        PRESENCE optional } |
     ID id-MACes-Maximum-Bitrate-LCR
                                           CRITICALITY ignore
                                                                   EXTENSION MACes-Maximum-Bitrate-LCR
                                                                                                                       PRESENCE optional }, --
1.28Mcps TDD only
E-DCH-MACdPDU-SizeToModifyList ::= SEQUENCE (SIZE (0.. maxNrOfMACdPDUSize)) OF E-DCH-MACdPDU-SizeListItem
E-DCH-LogicalChannelToDelete ::= SEQUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelToDeleteItem
E-DCH-LogicalChannelToDeleteItem ::= SEQUENCE {
    logicalChannelId
                                   LogicalChannelID,
    iE-Extensions
                                   ProtocolExtensionContainer { { E-DCH-LogicalChannelToDeleteItem-ExtIEs } }
                                                                                                                               OPTIONAL,
E-DCH-LogicalChannelToDeleteItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
LogicalChannelID ::= INTEGER (1..15)
E-DCH-HARQ-PO-FDD ::= INTEGER (0.. maxNrOfEDCH-HARQ-PO-QUANTSTEPs)
E-DCH-MACdFlow-ID ::= INTEGER (0..maxNrOfEDCHMACdFlows-1)
E-DCH-MACdFlows-Information ::= SEQUENCE {
    e-DCH-MACdFlow-Specific-Info
                                                   E-DCH-MACdFlow-Specific-InfoList,
```

```
ProtocolExtensionContainer { { E-DCH-MACdFlows-Information-ExtIEs} }
   iE-Extensions
           OPTIONAL.
    . . .
E-DCH-MACdFlows-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-MACdFlow-Multiplexing-List ::= BIT STRING ( SIZE(maxNrOfEDCHMACdFlows) )
E-DCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InfoItem
E-DCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                 E-DCH-MACdFlow-ID,
    allocationRetentionPriority
                                                 AllocationRetentionPriority,
    tnlOos
                                                 TnlOos
           OPTIONAL,
    payloadCRC-PresenceIndicator
                                                 PayloadCRC-PresenceIndicator,
   maximum-Number-of-Retransmissions-For-E-DCH
                                                 Maximum-Number-of-Retransmissions-For-E-DCH,
    eDCH-HARQ-PO-FDD
                                                 E-DCH-HARQ-PO-FDD,
    eDCH-MACdFlow-Multiplexing-List
                                                 E-DCH-MACdFlow-Multiplexing-List
                          OPTIONAL,
    eDCH-Grant-Type-Information
                                                 E-DCH-Grant-Type-Information,
   bundlingModeIndicator
                                                 BundlingModeIndicator
   OPTIONAL,
    eDCHLogicalChannelInformation
                                                 E-DCH-LogicalChannelInformation,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InfoItem-ExtIEs} }
   OPTIONAL,
E-DCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     PRESENCE optional
E-DCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InformationResp-Item
E-DCH-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                 E-DCH-MACdFlow-ID,
   bindingID
                                                 BindingID
           OPTIONAL,
    transportLayerAddress
                                                 TransportLayerAddress
           OPTIONAL,
    hARO-Process-Allocation-NonSched-2ms-EDCH
                                                 HARO-Process-Allocation-2ms-EDCH
                          OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InformationResp-Item-ExtIEs} }
   OPTIONAL,
E-DCH-MACdFlow-Specific-InformationResp-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-TransportBearerNotSetupIndicator
                                                CRITICALITY ignore EXTENSION TransportBearerNotSetupIndicator
                                                                                                                          PRESENCE optional
FDD only
E-DCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InfoItem-to-Modify
E-DCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     E-DCH-MACdFlow-ID,
    allocationRetentionPriority
                                                    AllocationRetentionPriority
           OPTIONAL,
    transportBearerRequestIndicator
                                                    TransportBearerRequestIndicator,
    tnlOos
                                                    TnlOos
            OPTIONAL,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                    Maximum-Number-of-Retransmissions-For-E-DCH
           OPTIONAL,
    eDCH-HARO-PO-FDD
                                                     E-DCH-HARO-PO-FDD
                            OPTIONAL,
    eDCH-MACdFlow-Multiplexing-List
                                                     E-DCH-MACdFlow-Multiplexing-List
                            OPTIONAL,
    eDCH-Grant-Type-Information
                                                     E-DCH-Grant-Type-Information
                            OPTIONAL,
    bundlingModeIndicator
                                                     BundlingModeIndicator
                            OPTIONAL,
    eDCH-LogicalChannelToAdd
                                                     E-DCH-LogicalChannelInformation
                            OPTIONAL,
    eDCH-LogicalChannelToModify
                                                     E-DCH-LogicalChannelToModify
                            OPTIONAL,
    eDCH-LogicalChannelToDelete
                                                     E-DCH-LogicalChannelToDelete
                            OPTIONAL,
                                                     ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
E-DCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-MACdFlows-to-Delete ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-to-Delete-Item
E-DCH-MACdFlow-to-Delete-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     E-DCH-MACdFlow-ID,
                                                     ProtocolExtensionContainer { { E-DCH-MACdFlow-to-Delete-Item-ExtIEs} }
    iE-Extensions
        OPTIONAL,
E-DCH-MACdFlow-to-Delete-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
E-DCH-Non-Scheduled-Transmission-Grant-Items ::= SEQUENCE
```

```
-- The following IE shall be ignored if id-Ext-Max-Bits-MACe-PDU-non-scheduled is present in E-DCH-Non-Scheduled-Transmission-Grant-Items-
ExtIEs
    maxBits-MACe-PDU-non-scheduled
                                                Max-Bits-MACe-PDU-non-scheduled.
    hARO-Process-Allocation-NonSched-2ms
                                                HARO-Process-Allocation-2ms-EDCH
           OPTIONAL.
                                                ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Transmission-Grant-Items-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
E-DCH-Non-Scheduled-Transmission-Grant-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- The following IE shall be present if the maximum number of bits to be signalled exceeds maxNrOfBits-MACe-PDU-non-scheduled
    { ID id-Ext-Max-Bits-MACe-PDU-non-scheduled
                                                    CRITICALITY reject
                                                                            EXTENSION Ext-Max-Bits-MACe-PDU-non-scheduled
                                                                                                                                        PRESENCE
optional},
    . . .
E-DCH-Non-serving-Relative-Grant-Down-Commands ::= INTEGER (0..100,...)
E-DCHProvidedBitRateValue ::= INTEGER(0..16777215,...,16777216..256000000)
-- Unit bit/s, Range 0..2^24-1..2^24..256,000,000, Step 1 bit
Maximum-Target-ReceivedTotalWideBandPower ::= INTEGER (0..621)
-- mapping as for RTWP measurement value, as specified in [22]
Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio ::= INTEGER (0..100)
-- Unit %, Range 0..100%, Step 1%
E-DCH-RL-Indication ::= ENUMERATED {
    e-DCH,
    non-e-DCH
E-DCH-Serving-Cell-Change-Info-Response ::= SEQUENCE
    e-DCH-serving-cell-choice
                                    E-DCH-serving-cell-choice,
    iE-Extensions
                                    ProtocolExtensionContainer { { E-DCH-serving-cell-informationResponse-ExtIEs} } OPTIONAL,
E-DCH-serving-cell-informationResponse-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-serving-cell-choice ::= CHOICE
    e-DCH-serving-cell-change-successful
                                                E-DCH-serving-cell-change-successful,
                                                E-DCH-serving-cell-change-unsuccessful,
    e-DCH-serving-cell-change-unsuccessful
E-DCH-serving-cell-change-successful ::= SEQUENCE {
    e-DCH-RL-InformationList-Rsp
                                            E-DCH-RL-InformationList-Rsp,
    iE-Extensions
                                        ProtocolExtensionContainer { { E-DCH-serving-cell-change-successful-ExtIEs} } OPTIONAL,
```

```
E-DCH-RL-InformationList-Rsp ::= SEOUENCE (SIZE (0..maxNrOfRLs)) OF E-DCH-RL-InformationList-Rsp-Item
E-DCH-RL-InformationList-Rsp-Item ::= SEQUENCE {
    e-DCH-FDD-DL-Control-Channel-Info E-DCH-FDD-DL-Control-Channel-Information,
   iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-RL-InformationList-Rsp-Item-ExtIEs} } OPTIONAL,
E-DCH-serving-cell-change-successful-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-RL-InformationList-Rsp-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-serving-cell-change-unsuccessful ::= SEQUENCE {
                                   ProtocolExtensionContainer { { E-DCH-serving-cell-change-unsuccessful-ExtIEs} } OPTIONAL,
   iE-Extensions
E-DCH-serving-cell-change-unsuccessful-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- The maximum repetitions should be limited to 1 so that this information is reported only once for a cell.
EDCH-RACH-Report-Value ::= SEQUENCE (SIZE(1.. maxNrOfCommonEDCH)) OF
    SEQUENCE {
                                       Granted-EDCH-RACH-Resources-Value,
       granted-EDCH-RACH-resources
                                       Denied-EDCH-RACH-Resources-Value,
       denied-EDCH-RACH-resources
       iE-Extensions ProtocolExtensionContainer { { EDCH-RACH-Report-Value-ExtIEs } }
                                                                                               OPTIONAL,
EDCH-RACH-Report-Value-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TFCI-Table-Index ::= INTEGER (0..1,...,2..7)
E-DCH-TTI-Length ::= CHOICE {
               DTX-Cvcle-2ms-Items,
               DTX-Cycle-10ms-Items,
    ten-ms
E-DCH-TTI-Length-to-Modify ::= CHOICE
               DTX-Cycle-2ms-to-Modify-Items,
    two-ms
               DTX-Cycle-10ms-to-Modify-Items,
    ten-ms
```

```
E-DPCCH-PO ::= INTEGER (0..maxNrOfEDPCCH-PO-QUANTSTEPs)
E-DPDCH-PowerInterpolation ::= BOOLEAN
E-Primary-Secondary-Grant-Selector ::= ENUMERATED {
    primary,
    secondary
E-DCH-MACdFlow-ID-LCR ::= INTEGER (0..maxNrOfEDCHMACdFlowsLCR-1)
E-DCH-MACdFlows-to-DeleteLCR ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlowsLCR)) OF E-DCH-MACdFlow-to-Delete-ItemLCR
E-DCH-MACdFlow-to-Delete-ItemLCR ::= SEQUENCE {
    e-DCH-MACdFlow-ID-LCR
                                                 E-DCH-MACdFlow-ID-LCR,
                                                 iE-Extensions
       OPTIONAL,
    . . .
E-DCH-MACdFlow-to-Delete-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Enhanced-UE-DRX-InformationLCR ::= SEQUENCE {
                                             T321,
    hS-DSCH-DRX-Cycle-FACH
                                             HS-DSCH-DRX-Cycle-FACH,
   hS-DSCH-RX-Burst-FACH
                                             HS-DSCH-RX-Burst-FACH,
   iE-Extensions
                                             ProtocolExtensionContainer { { Enhanced-UE-DRX-InformationLCR-ExtIEs } }
                                                                                                                                OPTIONAL,
Enhanced-UE-DRX-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-ID-LCR := INTEGER(0..255)
E-HICH-Signature-Sequence ::= INTEGER (0..maxNrofSigSeqRGHI-1)
End-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    end-of-audit-sequence,
   not-end-of-audit-sequence
E-Serving-Grant-Value ::= INTEGER (0..38)
E-RGCH-2-IndexStepThreshold ::= INTEGER (0..37)
E-RGCH-3-IndexStepThreshold ::= INTEGER (0..37)
```

```
E-RGCH-E-HICH-FDD-Code-Information ::= CHOICE {
    replace
                           E-RGCH-E-HICH-FDD-Code-List.
    remove
                            NULL.
E-RGCH-E-HICH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfE-RGCHs-E-HICHs)) OF FDD-DL-ChannelisationCodeNumber
E-RGCH-Release-Indicator ::= ENUMERATED {e-RGCHreleased}
E-RGCH-Signature-Sequence ::= INTEGER (0..maxNrofSiqSeqRGHI-1)
E-RNTI ::= INTEGER (0..65535)
E-TFCI ::= INTEGER (0..127)
E-TFCI-BetaEC-Boost ::= INTEGER (0..127,...)
E-TFCI-Boost-Information ::= SEQUENCE {
    e-TFCI-BetaEC-Boost
                                                    E-TFCI-BetaEC-Boost,
    uL-Delta-T2TP
                                                    UL-Delta-T2TP
                                                                            OPTIONAL,
    -- This IE shall be present if the E-TFCI BetaEC Boost IE value is not set to 127.
                                                    ProtocolExtensionContainer { { E-TFCI-Boost-Information-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
E-TFCI-Boost-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-TFCS-Information ::= SEOUENCE {
    e-DCH-TFCI-Table-Index
                                                        E-DCH-TFCI-Table-Index.
    e-DCH-Min-Set-E-TFCI
                                                    E-TFCI
                                                                    OPTIONAL,
    reference-E-TFCI-Information
                                                    Reference-E-TFCI-Information,
                                                    ProtocolExtensionContainer { {E-TFCS-Information-ExtIEs} }
   iE-Extensions
                                                                                                                         OPTIONAL,
E-TFCS-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
                                                                                                                         PRESENCE optional }
     ID id-E-TFCI-Boost-Information
                                            CRITICALITY reject
                                                                    EXTENSION E-TFCI-Boost-Information
    { ID id-E-DPDCH-PowerInterpolation CRITICALITY reject
                                                                EXTENSION E-DPDCH-PowerInterpolation
                                                                                                                     PRESENCE optional },
E-TTI ::= ENUMERATED {
    e-TTI-2ms.
    e-TTI-10ms
E-DCHProvidedBitRate ::= SEQUENCE (SIZE (1..maxNrOfPriorityClasses)) OF E-DCHProvidedBitRate-Item
E-DCHProvidedBitRate-Item ::= SEQUENCE {
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
```

```
E-DCHProvidedBitRateValue,
    e-DCHProvidedBitRateValue
    iE-Extensions
                                        ProtocolExtensionContainer { { E-DCHProvidedBitRate-Item-ExtIEs} }
                                                                                                                         OPTIONAL,
E-DCHProvidedBitRate-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-PowerOffset ::= INTEGER (0..255,...)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
E-RGCH-PowerOffset ::= INTEGER (0..255,...)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
E-HICH-PowerOffset ::= INTEGER (0..255,...)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
E-HICH-TimeOffset ::= INTEGER (4..44)
E-HICH-TimeOffsetLCR ::= INTEGER (4..15)
E-DCH-Information ::= SEQUENCE {
    e-PUCH-Information
                                                E-PUCH-Information,
    e-TFCS-Information-TDD
                                                E-TFCS-Information-TDD,
    e-DCH-MACdFlows-Information-TDD
                                                E-DCH-MACdFlows-Information-TDD,
    e-DCH-Non-Scheduled-Grant-Info
                                                E-DCH-Non-Scheduled-Grant-Info OPTIONAL,
    e-DCH-TDD-Information
                                                E-DCH-TDD-Information,
                                                ProtocolExtensionContainer { { E-DCH-Information-ExtIEs} }
    iE-Extensions
                                                                                                                         OPTIONAL,
E-DCH-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
E-PUCH-Information ::= SEQUENCE {
    minCR
                                                CodeRate,
    maxCR
                                                CodeRate,
                                                HARQ-Info-for-E-DCH,
   hargInfo
    n-E-UCCH
                                                N-E-UCCH,
                                                ProtocolExtensionContainer { { E-PUCH-Information-ExtIEs } }
    iE-Extensions
                                                                                                                         OPTIONAL,
E-PUCH-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
E-TFCS-Information-TDD ::= SEQUENCE {
    e-DCH-OPSK-RefBetaInfo
                                                E-DCH-OPSK-RefBetaInfo.
    e-DCH-sixteenOAM-RefBetaInfo
                                                E-DCH-sixteenOAM-RefBetaInfo,
   iE-Extensions
                                                ProtocolExtensionContainer { { E-TFCS-Information-TDD-ExtIEs } }
                                                                                                                          OPTIONAL.
E-TFCS-Information-TDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-OPSK-RefBetaInfo ::= SEQUENCE (SIZE (1..maxNrOfRefBetas)) OF E-DCH-RefBeta-Item
E-DCH-sixteenOAM-RefBetaInfo ::= SEOUENCE (SIZE (1..maxNrOfRefBetas)) OF E-DCH-RefBeta-Item
E-DCH-RefBeta-Item ::= SEQUENCE {
    refCodeRate
                            CodeRate-short,
    refBeta
                            RefBeta
E-DCH-MACdFlows-Information-TDD ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-InfoTDDItem
E-DCH-MACdFlow-InfoTDDItem ::= SEOUENCE {
    e-DCH-MACdFlow-ID
                                                     E-DCH-MACdFlow-ID,
    allocationRetentionPriority
                                                    AllocationRetentionPriority,
    tnlOos
                                                    TnlOos
                                                                                 OPTIONAL,
    bindingID
                                                    BindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                                    TransportLayerAddress
                                                                                 OPTIONAL,
    payloadCRC-PresenceIndicator
                                                    PayloadCRC-PresenceIndicator,
                                                    Maximum-Number-of-Retransmissions-For-E-DCH,
    maximum-Number-of-Retransmissions-For-E-DCH
    eDCH-HARO-PO-TDD
                                                    E-DCH-HARQ-PO-TDD,
    eDCH-MACdFlow-Multiplexing-List
                                                    E-DCH-MACdFlow-Multiplexing-List
                                                                                                                          OPTIONAL,
    eDCH-Grant-TypeTDD
                                                    E-DCH-Grant-TypeTDD,
    eDCHLogicalChannelInformation
                                                    E-DCH-LogicalChannelInformation,
    eDCH-MACdFlow-Retransmission-Timer
                                                    E-DCH-MACdFlow-Retransmission-Timer
                                                                                             OPTIONAL.
    -- Mandatory for LCR TDD, Not applicable for 3.84Mcps TDD and 7.68Mcps TDD
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-MACdFlow-InfoTDDItem-ExtIEs} }
    OPTIONAL,
    . . .
E-DCH-MACdFlow-InfoTDDItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-MACdFlow-Retransmission-Timer ::= ENUMERATED {
   ms10, ms15, ms20, ms25, ms30, ms35, ms40, ms45, ms50, ms55, ms60, ms65,
   ms70, ms75, ms80, ms85, ms90, ms95, ms100, ms110, ms120, ms140, ms160,
   ms200, ms240, ms280, ms320, ms400, ms480, ms560,...
E-DCH-HARQ-PO-TDD ::= INTEGER (0..6)
```

```
E-DCH-Grant-TypeTDD ::= ENUMERATED {
    scheduled,
    non-scheduled
E-DCH-Non-Scheduled-Grant-Info ::= SEQUENCE {
    timeslotResource
                                                E-DCH-TimeslotResource,
    powerResource
                                                E-DCH-PowerResource,
    repetitionPeriod
                                                RepetitionPeriod,
    repetitionLength
                                                RepetitionLength,
                                                TddE-PUCH-Offset,
    tddE-PUCH-Offset
    tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
                                                ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
E-DCH-Non-Scheduled-Grant-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TimeslotResource ::= BIT STRING (SIZE (13))
E-DCH-TimeslotResourceLCR ::= BIT STRING (SIZE (5))
E-DCH-PowerResource ::= INTEGER(1..32)
TddE-PUCH-Offset ::= INTEGER(0..255)
E-DCH-TDD-Information ::= SEQUENCE {
    e-DCH-TDD-Maximum-Bitrate
                                                    E-DCH-TDD-Maximum-Bitrate
                                                                                                                          OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                    E-DCH-Processing-Overload-Level
                                                                                                                          OPTIONAL,
    e-DCH-PowerOffset-for-SchedulingInfo
                                                    E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                          OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-TDD-Information-ExtIEs } }
                                                                                                                          OPTIONAL,
E-DCH-TDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Maximum-Bitrate ::= INTEGER (0..9201,...)
E-DCH-Information-Response ::= SEQUENCE {
    e-DCH-TDD-MACdFlow-Specific-InformationResp
                                                     E-DCH-TDD-MACdFlow-Specific-InformationResp OPTIONAL,
    e-AGCH-Specific-Information-ResponseTDD
                                                     E-AGCH-Specific-InformationRespListTDD OPTIONAL,
                                                     E-RNTI,
    scheduled-E-HICH-Specific-InformationResp
                                                     Scheduled-E-HICH-Specific-Information-ResponseLCRTDD
                                                                                                                     OPTIONAL, -- 1.28Mcps TDD only
                                                     ProtocolExtensionContainer { { E-DCH-Information-Response-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
E-DCH-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
Scheduled-E-HICH-Specific-Information-ResponseLCRTDD ::= SEQUENCE (SIZE (1.. maxNrOfEHICHCodes)) OF Scheduled-E-HICH-Specific-InformationItem-
ResponseLCRTDD
Scheduled-E-HICH-Specific-InformationItem-ResponseLCRTDD ::= SEQUENCE {
                                    ΕI,
    e-HICH-ID-TDD
                                    E-HICH-ID-TDD,
    iE-Extensions
                                                ProtocolExtensionContainer {{ Scheduled-E-HICH-Specific-InformationItem-ResponseLCRTDD-ExtIEs}}
       OPTIONAL,
    . . .
Scheduled-E-HICH-Specific-InformationItem-ResponseLCRTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-E-HICH-ID-TDD CRITICALITY ignore EXTENSION Extended-E-HICH-ID-TDD PRESENCE optional},
    -- Applicable to 1.28Mcps TDD only when the E-HICH identity has a value larger than 31.
EI ::= INTEGER (0..3)
E-HICH-ID-TDD ::= INTEGER (0..31)
E-HICH-Type ::= ENUMERATED {scheduled, non-scheduled}
E-DCH-TDD-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-TDD-MACdFlow-Specific-InformationResp-Item
E-DCH-TDD-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
    e-DCH-MacdFlow-Id
                                                     E-DCH-MACdFlow-ID,
    bindingID
                                                    BindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                                    TransportLayerAddress
                                                                                 OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-TDD-MACdFlow-Specific-InformationRespItem-ExtIEs } }
    OPTIONAL,
    . . .
E-DCH-TDD-MACdFlow-Specific-InformationRespItem-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Specific-InformationRespListTDD ::= SEQUENCE (SIZE (1..maxNrOfEAGCHCodes)) OF E-AGCH-Specific-InformationResp-ItemTDD
E-AGCH-Specific-InformationResp-ItemTDD ::= SEQUENCE {
    e-AGCH-Id
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-AGCH-Specific-InformationResp-ItemTDD-ExtIEs } }
    OPTIONAL,
E-AGCH-Specific-InformationResp-ItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Id ::= INTEGER (0..31,...,32..255)
```

```
E-DCH-Information-Reconfig ::= SEQUENCE {
    e-PUCH-Information
                                                 E-PUCH-Information
                                                                                                                      OPTIONAL.
    e-TFCS-Information-TDD
                                                 E-TFCS-Information-TDD
                                                                                                                      OPTIONAL.
    e-DCH-MACdFlows-to-Add
                                                 E-DCH-MACdFlows-Information-TDD
                                                                                                                      OPTIONAL.
    e-DCH-MACdFlows-to-Delete
                                                 E-DCH-MACdFlows-to-Delete
                                                                                                                      OPTIONAL.
    e-DCH-Non-Scheduled-Grant-Info
                                                 E-DCH-Non-Scheduled-Grant-Info
                                                                                                                      OPTIONAL,
                                                 E-DCH-TDD-Information
    e-DCH-TDD-Information
                                                                                                                      OPTIONAL,
    e-DCH-TDD-Information-to-Modify
                                                 E-DCH-TDD-Information-to-Modify
                                                                                                                      OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Information-Reconfig-ExtIEs} } OPTIONAL,
E-DCH-Information-Reconfig-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Information-to-Modify ::= SEQUENCE
    e-DCH-TDD-Information-to-Modify-List
                                            E-DCH-TDD-Information-to-Modify-List
                                                                                      OPTIONAL,
    mACeReset-Indicator
                                            MACeReset-Indicator
                                                                                      OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { E-DCH-TDD-Information-to-Modify-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
E-DCH-TDD-Information-to-Modify-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-MACdPDUSizeFormat
                                                         CRITICALITY reject EXTENSION E-DCH-MACdPDUSizeFormat
    PRESENCE optional },
    . . .
E-DCH-TDD-Information-to-Modify-List ::= SEOUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-ModifyTDDItem
E-DCH-MACdFlow-ModifyTDDItem ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     E-DCH-MACdFlow-ID,
    allocationRetentionPriority
                                                     AllocationRetentionPriority
                                                                                      OPTIONAL,
    transportBearerRequestIndicator
                                                     TransportBearerRequestIndicator,
                                                     BindingID
    bindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                 OPTIONAL,
    tnlOos
                                                     TnlOos
                                                                                 OPTIONAL,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                     Maximum-Number-of-Retransmissions-For-E-DCH
                                                                                                                      OPTIONAL,
    eDCH-HARO-PO-TDD
                                                     E-DCH-HARO-PO-TDD
                                                                                                                   OPTIONAL,
    eDCH-MACdFlow-Multiplexing-List
                                                     E-DCH-MACdFlow-Multiplexing-List
                                                                                                                   OPTIONAL,
    eDCH-Grant-TypeTDD
                                                     E-DCH-Grant-TypeTDD
                                                                                                                   OPTIONAL.
    e-DCH-LogicalChannelToAdd
                                                     E-DCH-LogicalChannelInformation
                                                                                                                      OPTIONAL,
    e-DCH-LogicalChannelToModify
                                                     E-DCH-LogicalChannelToModify
                                                                                                                      OPTIONAL,
    e-DCH-LogicalChannelToDelete
                                                     E-DCH-LogicalChannelToDelete
                                                                                                                      OPTIONAL.
                                                     E-DCH-MACdFlow-Retransmission-Timer
    eDCH-MACdFlow-Retransmission-Timer
                                                                                                                      OPTIONAL,
    -- LCR TDD only
                                                     ProtocolExtensionContainer { {E-DCH-MACdFlow-ModifyTDDItem-ExtIEs } }
    iE-Extensions
                                                                                                                                  OPTIONAL,
E-DCH-MACdFlow-ModifyTDDItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
Maximum-Generated-ReceivedTotalWideBandPowerInOtherCells ::= INTEGER (0...621)
-- mapping as for RTWP measurement value, as specified in [23]
E-DCH-768-Information ::= SEQUENCE {
    e-PUCH-Information
                                                E-PUCH-Information,
    e-TFCS-Information-TDD
                                                 E-TFCS-Information-TDD
    e-DCH-MACdFlows-Information-TDD
                                                E-DCH-MACdFlows-Information-TDD,
    e-DCH-Non-Scheduled-Grant-Info768
                                                 E-DCH-Non-Scheduled-Grant-Info768
                                                                                     OPTIONAL,
                                                 E-DCH-TDD-Information768,
    e-DCH-TDD-Information768
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-768-Information-ExtIEs} }
                                                                                                                          OPTIONAL,
    . . .
E-DCH-768-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-Non-Scheduled-Grant-Info768 ::= SEQUENCE
    timeslotResource
                                                 E-DCH-TimeslotResource,
    powerResource
                                                 E-DCH-PowerResource,
    repetitionPeriod
                                                 RepetitionPeriod,
    repetitionLength
                                                 RepetitionLength,
    tddE-PUCH-Offset
                                                 TddE-PUCH-Offset,
    tdd-ChannelisationCode768
                                                 TDD-ChannelisationCode768,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info768-ExtIEs } }
                                                                                                                                          OPTIONAL.
E-DCH-Non-Scheduled-Grant-Info768-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    . . .
E-DCH-TDD-Information768 ::= SEQUENCE {
    e-DCH-TDD-Maximum-Bitrate768
                                                     E-DCH-TDD-Maximum-Bitrate768
                                                                                                                          OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                     E-DCH-Processing-Overload-Level
                                                                                                                          OPTIONAL,
    e-DCH-PowerOffset-for-SchedulingInfo
                                                     E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                          OPTIONAL,
                                                     ProtocolExtensionContainer { { E-DCH-TDD-Information768-ExtIEs } }
   iE-Extensions
                                                                                                                                  OPTIONAL,
E-DCH-TDD-Information768-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Maximum-Bitrate768 ::= INTEGER (0..17713,...)
E-DCH-768-Information-Reconfig ::= SEQUENCE {
    e-PUCH-Information
                                                 E-PUCH-Information
                                                                                                                      OPTIONAL,
    e-TFCS-Information-TDD
                                                 E-TFCS-Information-TDD
                                                                                                                      OPTIONAL,
    e-DCH-MACdFlows-to-Add
                                                 E-DCH-MACdFlows-Information-TDD
                                                                                                                      OPTIONAL,
    e-DCH-MACdFlows-to-Delete
                                                 E-DCH-MACdFlows-to-Delete
                                                                                                                      OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info768
                                                 E-DCH-Non-Scheduled-Grant-Info768
                                                                                                                          OPTIONAL,
    e-DCH-TDD-Information768
                                                 E-DCH-TDD-Information768
                                                                                                                          OPTIONAL,
```

```
e-DCH-TDD-Information-to-Modify
                                                 E-DCH-TDD-Information-to-Modify
                                                                                                                      OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-768-Information-Reconfig-ExtIEs} } OPTIONAL,
E-DCH-768-Information-Reconfig-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-LCR-Information ::= SEOUENCE {
    e-PUCH-LCR-Information
                                                 E-PUCH-LCR-Information,
    e-TFCS-Information-TDD
                                                 E-TFCS-Information-TDD,
    e-DCH-MACdFlows-Information-TDD
                                                 E-DCH-MACdFlows-Information-TDD.
    e-DCH-Non-Scheduled-Grant-LCR-Info
                                                 E-DCH-Non-Scheduled-Grant-LCR-Info OPTIONAL.
    e-DCH-LCRTDD-Information
                                                 E-DCH-LCRTDD-Information,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-LCR-Information-ExtIEs} }
                                                                                                                          OPTIONAL,
    . . .
E-DCH-LCR-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
E-PUCH-LCR-Information ::= SEOUENCE {
   minCR
                                                 CodeRate,
    maxCR
                                                 CodeRate,
   harqInfo
                                                 HARO-Info-for-E-DCH,
    pRXdes-base
                                                 PRXdes-base,
    e-PUCH-TPC-StepSize
                                                 TDD-TPC-UplinkStepSize-LCR,
                                                 TDD-TPC-DownlinkStepSize,
    e-AGCH-TPC-StepSize
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-PUCH-LCR-Information-ExtIEs } }
                                                                                                                          OPTIONAL,
E-PUCH-LCR-Information-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-PUCH-PowerControlGAP
                                        CRITICALITY ignore
                                                                 EXTENSION ControlGAP
                                                                                              PRESENCE optional
E-DCH-Non-Scheduled-Grant-LCR-Info ::= SEQUENCE
    timeslotResourceLCR
                                                 E-DCH-TimeslotResourceLCR,
    powerResource
                                                 E-DCH-PowerResource,
    repetitionPeriod
                                                 RepetitionPeriod,
    repetitionLength
                                                 RepetitionLength,
    subframeNumber
                                                 ENUMERATED {v0, v1},
    tddE-PUCH-Offset
                                                 TddE-PUCH-Offset,
    tdd-ChannelisationCode
                                                 TDD-ChannelisationCode.
    n-E-UCCHLCR
                                                N-E-UCCHLCR,
    e-HICH-LCR-Information
                                                 E-HICH-LCR-Information.
                                                 ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-LCR-Info-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
E-DCH-Non-Scheduled-Grant-LCR-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
```

```
E-HICH-LCR-Information ::= SEQUENCE {
    e-HICH-ID-TDD
                                            E-HICH-ID-TDD.
    signatureSequenceGroupIndex
                                                SignatureSequenceGroupIndex,
                                                ProtocolExtensionContainer { { E-HICH-LCR-Information-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL,
E-HICH-LCR-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                                                                                                 PRESENCE optional },
    { ID id-Extended-E-HICH-ID-TDD
                                        CRITICALITY ignore EXTENSION Extended-E-HICH-ID-TDD
    -- Applicable to 1.28Mcps TDD only when the E-HICH identity has a value larger than 31.
E-DCH-LCRTDD-Information ::= SEQUENCE
    e-DCH-LCRTDD-PhysicalLayerCategory
                                                E-DCH-LCRTDD-PhysicalLayerCategory
                                                                                                                     OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                E-DCH-Processing-Overload-Level
                                                                                                                     OPTIONAL,
    e-DCH-PowerOffset-for-SchedulingInfo
                                                E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                     OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-LCRTDD-Information-ExtIEs } }
                                                                                                                          OPTIONAL,
E-DCH-LCRTDD-Information-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
     ID id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory
                                                                             CRITICALITY reject
                                                                                                                     EXTENSION Extended-E-DCH-LCRTDD-
PhysicalLayerCategory
                                PRESENCE optional } |
    -- This IE shall be used if the E-DCH Physical Layer Category has a value larger than 5.
    { ID id-MaximumNumber-Of-Retransmission-for-Scheduling-Info-LCRTDD
                                                                             CRITICALITY ignore
                                                                                                                     EXTENSION Maximum-Number-of-
Retransmissions-For-E-DCH
                                PRESENCE optional } |
    { ID id-E-DCH-RetransmissionTimer-for-SchedulingInfo-LCRTDD
                                                                             CRITICALITY ignore
                                                                                                                     EXTENSION E-DCH-MACdFlow-
Retransmission-Timer
                                PRESENCE optional }|
    { ID id-E-AGCH-UE-Inactivity-Monitor-Threshold
                                                                             CRITICALITY ignore
                                                                                                                     EXTENSION E-AGCH-UE-Inactivity-
                           PRESENCE optional },
Monitor-Threshold
    . . .
E-DCH-LCRTDD-PhysicalLayerCategory ::= INTEGER(1..5)
E-DCH-LCR-Information-Reconfig ::= SEQUENCE {
                                                E-PUCH-LCR-Information
    e-PUCH-LCR-Information
                                                                                                                     OPTIONAL,
    e-TFCS-Information-TDD
                                                E-TFCS-Information-TDD
                                                                                                                     OPTIONAL,
                                                E-DCH-MACdFlows-Information-TDD
    e-DCH-MACdFlows-to-Add
                                                                                                                     OPTIONAL,
                                                E-DCH-MACdFlows-to-Delete
    e-DCH-MACdFlows-to-Delete
                                                                                                                     OPTIONAL,
    e-DCH-Non-Scheduled-Grant-LCR-Info
                                                E-DCH-Non-Scheduled-Grant-LCR-Info
                                                                                                                     OPTIONAL,
    e-DCH-LCRTDD-Information
                                                E-DCH-LCRTDD-Information
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information-to-Modify
                                                E-DCH-TDD-Information-to-Modify
                                                                                                                     OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-LCR-Information-Reconfig-ExtIEs} } OPTIONAL,
E-DCH-LCR-Information-Reconfig-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
Enabling-Delay ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128}
    -- Unit of radio frames
Enabling-Delay-Ext-LCR ::= ENUMERATED {infinity,...}
Enhanced-FACH-Capability ::= ENUMERATED {
    enhanced-FACH-capable,
    enhanced-FACH-non-capable
EnhancedHSServingCC-Abort ::= ENUMERATED {abortEnhancedHSServingCC,...}
Enhanced-PCH-Capability ::= ENUMERATED {
    enhanced-PCH-capable,
    enhanced-PCH-non-capable
Enhanced-UE-DRX-Capability ::= ENUMERATED {
    enhanced-UE-DRX-capable,
    enhanced-UE-DRX-non-capable
Enhanced-UE-DRX-InformationFDD ::= SEQUENCE {
                                                T321,
   hS-DSCH-DRX-Cycle-FACH
                                                HS-DSCH-DRX-Cycle-FACH,
   hS-DSCH-RX-Burst-FACH
                                                HS-DSCH-RX-Burst-FACH,
    dRX-Interruption-by-HS-DSCH
                                                DRX-Interruption-by-HS-DSCH,
                                                    ProtocolExtensionContainer { { Enhanced-UE-DRX-InformationFDD-ExtIEs } }
   iE-Extensions
                                                                                                                                         OPTIONAL,
Enhanced-UE-DRX-InformationFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Extended-E-DCH-LCRTDD-PhysicalLayerCategory ::= INTEGER(6,...)
Ext-Max-Bits-MACe-PDU-non-scheduled ::= INTEGER(19983..22978,...)
Ext-Reference-E-TFCI-PO ::= INTEGER(30..31,...)
ExtendedPropagationDelay ::= INTEGER(255..1023)
Extended-RNC-ID
                                ::= INTEGER (4096..65535)
Extended-Round-Trip-Time-Value ::= INTEGER(32767..103041)
-- See also mapping in [22]
Extended-HS-SCCH-ID
                                    ::= INTEGER (32..255)
Extended-HS-SICH-ID
                                    ::= INTEGER (32..255)
```

```
Extended-E-HICH-ID-TDD
                                   ::= INTEGER (32..255)
E-DCH-Semi-PersistentScheduling-Information-LCR ::= SEQUENCE {
    repetition-Period-List-LCR
                                           Repetition-Period-List-LCR,
    e-DCH-SPS-Indicator
                                           E-DCH-SPS-Indicator,
    sPS-E-DCH-releted-E-HICH-Information
                                          E-HICH-LCR-Information,
   iE-Extensions
                                           ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-LCR-ExtIEs } }
   OPTIONAL,
    . . .
E-DCH-Semi-PersistentScheduling-Information-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-E-DCH-SPS-Reservation-Indicator
                                          CRITICALITY ignore
                                                                  EXTENSION SPS-Reservation-Indicator
                                                                                                                 PRESENCE optional },
E-DCH-SPS-Indicator ::= BIT STRING (SIZE (16))
E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR ::= SEQUENCE {
    repetition-Period-List-LCR
                                           Repetition-Period-List-LCR
                                                                          OPTIONAL,
    e-DCH-SPS-Indicator
                                           E-DCH-SPS-Indicator
                                                                          OPTIONAL,
    sPS-E-DCH-releted-E-HICH-Information
                                           E-HICH-LCR-Information
                                                                          OPTIONAL,
   iE-Extensions
                                           ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs } }
           OPTIONAL,
E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-E-DCH-SPS-Reservation-Indicator
                                           CRITICALITY ignore
                                                                                                                 PRESENCE optional },
                                                                  EXTENSION SPS-Reservation-Indicator
    . . .
E-DCH-Semi-PersistentScheduling-Information-ResponseLCR ::= SEQUENCE {
    timeslot-Resource-Related-Information
                                              E-DCH-TimeslotResourceLCR,
   powerResource
                                              E-DCH-PowerResource,
   repetition-Period-List-LCR
                                              Repetition-Period-List-LCR,
    -- the IE shall be ignored
    repetitionLength
                                              RepetitionLength,
    -- the IE shall be ignored
                                              ENUMERATED {v0, v1},
    subframeNumber
    tddE-PUCH-Offset
                                              TddE-PUCH-Offset,
    tdd-ChannelisationCode
                                              TDD-ChannelisationCode,
   n-E-UCCHLCR
                                              N-E-UCCHLCR.
                                              ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs } }
   iE-Extensions
           OPTIONAL,
    . . .
E-DCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE
                                                                                                                 optional },
    -- mandaroty for 1.28Mcps TDD.
```

```
__ _______
-- -----
FACH-Measurement-Occasion-Cycle-Length-Coefficient ::= INTEGER(1..12)
Fast-Reconfiguration-Mode ::= ENUMERATED {fast,...}
Fast-Reconfiguration-Permission ::= ENUMERATED {allowed,...}
FDD-DL-ChannelisationCodeNumber ::= INTEGER(0.. 511)
-- According to the mapping in [9]. The maximum value is equal to the DL spreading factor -1--
FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfCodes)) OF FDD-DL-CodeInformationItem
FDD-DL-CodeInformationItem ::= SEQUENCE {
   dl-ScramblingCode
                                          DL-ScramblingCode,
                                          FDD-DL-ChannelisationCodeNumber,
    fdd-DL-ChannelisationCodeNumber
    transmissionGapPatternSequenceCodeInformation
                                                     TransmissionGapPatternSequenceCodeInformation
                                                                                                                   OPTIONAL,
   iE-Extensions
                                          ProtocolExtensionContainer { { FDD-DL-CodeInformationItem-ExtIEs} }
                                                                                                               OPTIONAL,
FDD-DL-CodeInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FDD-S-CCPCH-FrameOffset ::= ENUMERATED {
   v1, v2, v4, ...
FDD-S-CCPCH-Offset ::= INTEGER (0..149)
-- 0: 0 chip, 1: 256 chip, 2: 512 chip, .. ,149: 38144 chip [7] --
FDD-TPC-DownlinkStepSize ::= ENUMERATED {
   step-size0-5,
   step-size1,
   step-size1-5,
   step-size2,
F-DPCH-Capability ::= ENUMERATED {
    f-DPCH-capable,
    f-DPCH-non-capable
F-DPCH-SlotFormat ::= INTEGER (0..9)
F-DPCH-SlotFormatCapability ::= ENUMERATED {
    f-DPCH-slot-format-capable,
    f-DPCH-slot-format-non-capable
```

```
FirstRLS-Indicator ::= ENUMERATED {
   first-RLS.
   not-first-RLS,
FNReportingIndicator ::= ENUMERATED {
fN-reporting-required,
fN-reporting-not-required
FrameHandlingPriority ::= INTEGER (0..15)
-- 0=lowest priority, 15=highest priority --
FrameAdjustmentValue ::= INTEGER(0..4095)
FrameOffset ::= INTEGER (0..255)
FPACH-Power ::= INTEGER (-150..400,...) -- FPACH-power = power * 10
-- If power <= -15 FPACH shall be set to -150
-- If power >= 40 FPACH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
-- ------
-- ------
GANSS-AddClockModels ::= CHOICE {
   navClockModel
                                 GANSS-NAVclockModel,
   cnavClockModel
                                 GANSS-CNAVclockModel,
   glonassClockModel
                                 GANSS-GLONASSclockModel,
   sbasClockModel
                                 GANSS-SBASclockModel,
GANSS-AddIonoModelReq ::= BIT STRING (SIZE(2))
GANSS-AddNavigationModelsReg ::= BOOLEAN
GANSS-AddOrbitModels ::= CHOICE {
   navKeplerianSet
                                  GANSS-NavModel-NAVKeplerianSet,
   cnavKeplerianSet
                                 GANSS-NavModel-CNAVKeplerianSet,
   glonassECEF
                                 GANSS-NavModel-GLONASSecef,
   sbasECEF
                                 GANSS-NavModel-SBASecef,
GANSS-AddUTCModelsReq ::= BOOLEAN
GANSS-Additional-Ionospheric-Model ::= SEQUENCE {
                                     BIT STRING (SIZE(2)),
```

```
alpha-beta-parameters
                                       GPS-Ionospheric-Model,
   ie-Extensions
                                       ProtocolExtensionContainer { GANSS-Additional-Ionospheric-Model-ExtIEs } }
                                                                                                                     OPTIONAL,
GANSS-Additional-Ionospheric-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
GANSS-Additional-Navigation-Models ::= SEQUENCE {
   ganss-Transmission-Time
                               GANSS-Transmission-Time,
   non-broadcastIndication
                               ENUMERATED { true }
                                                                                                                             OPTIONAL,
   ganssSatInfoNavList
                               Ganss-Sat-Info-AddNavList,
   ie-Extensions
                               ProtocolExtensionContainer { GANSS-Additional-Navigation-Models-ExtIEs } } OPTIONAL,
    . . .
GANSS-Additional-Navigation-Models-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
GANSS-Additional-Time-Models ::= SEQUENCE (SIZE (1..maxGANSS-1)) OF GANSS-Time-Model
GANSS-Additional-UTC-Models ::= CHOICE {
   utcModel1
                       GANSS-UTCmodelSet1,
   utcModel2
                       GANSS-UTCmodelSet2,
   utcModel3
                       GANSS-UTCmodelSet3,
    . . .
GANSS-Almanac ::= SEQUENCE{
                                       INTEGER (0..255),
   ganss-wk-number
   qANSS-AlmanacModel
                                       GANSS-AlmanacModel,
                                       OPTIONAL,
   ie-Extensions
GANSS-Almanac-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-AlmanacModel ::= CHOICE
   gANSS-keplerianParameters
                                       GANSS-KeplerianParametersAlm,
    . . . ,
    extension-GANSS-AlmanacModel
                                       Extension-GANSS-AlmanacModel
```

```
::= ProtocolIE-Single-Container {{ Extension-GANSS-AlmanacModel-IE }}
Extension-GANSS-AlmanacModel
Extension-GANSS-AlmanacModel-IE NBAP-PROTOCOL-IES ::= {
    { ID id-GANSS-alm-keplerianNAVAlmanac
                                                  CRITICALITY
                                                                  ignore
                                                                             TYPE
                                                                                     GANSS-ALM-NAVKeplerianSet
                                                                                                                                   PRESENCE
   mandatory} |
    { ID id-GANSS-alm-keplerianReducedAlmanac
                                                  CRITICALITY
                                                                  ignore
                                                                             TYPE
                                                                                     GANSS-ALM-ReducedKeplerianSet
                                                                                                                           PRESENCE
   mandatory} |
    { ID id-GANSS-alm-keplerianMidiAlmanac
                                                  CRITICALITY
                                                                  ignore
                                                                             TYPE
                                                                                     GANSS-ALM-MidiAlmanacSet
                                                                                                                                   PRESENCE
   mandatory}
    { ID id-GANSS-alm-keplerianGLONASS
                                                  CRITICALITY
                                                                  ignore
                                                                             TYPE
                                                                                     GANSS-ALM-GlonassAlmanacSet
                                                                                                                                   PRESENCE
   mandatory}
    { ID id-GANSS-alm-ecefSBASAlmanac
                                                  CRITICALITY
                                                                  ignore
                                                                             TYPE
                                                                                     GANSS-ALM-ECEFsbasAlmanacSet
                                                                                                                           PRESENCE
   mandatory}
GANSS-ALM-ECEFsbasAlmanacSet ::= SEQUENCE {
    sat-info-SBASecefList
                              GANSS-SAT-Info-Almanac-SBASecefList,
   ie-Extensions
                              ProtocolExtensionContainer { GANSS-ALM-ECEFsbasAlmanacSet-ExtIEs } }
                                                                                                                    OPTIONAL,
GANSS-ALM-ECEFsbasAlmanacSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-ALM-GlonassAlmanacSet ::= SEQUENCE {
    sat-info-GLOkpList
                              GANSS-SAT-Info-Almanac-GLOkpList,
                              ie-Extensions
                                                                                                                    OPTIONAL,
GANSS-ALM-GlonassAlmanacSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-ALM-MidiAlmanacSet ::= SEOUENCE {
                              INTEGER (0..255),
   sat-info-MIDIkpList
                              GANSS-SAT-Info-Almanac-MIDIkpList,
                              ProtocolExtensionContainer { { GANSS-ALM-MidiAlmanacSet-ExtIEs } }
   ie-Extensions
                                                                                                                    OPTIONAL,
GANSS-ALM-MidiAlmanacSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-ALM-NAVKeplerianSet ::= SEQUENCE {
                              INTEGER (0..255),
   t-oa
```

```
sat-info-NAVkpList
                               GANSS-SAT-Info-Almanac-NAVkpList,
    ie-Extensions
                                ProtocolExtensionContainer { GANSS-ALM-NAVKeplerianSet-ExtIEs } }
                                                                                                                        OPTIONAL.
GANSS-ALM-NAVKeplerianSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-ALM-ReducedKeplerianSet ::= SEQUENCE {
                               INTEGER (0..255),
    sat-info-REDkpList
                               GANSS-SAT-Info-Almanac-REDkpList,
                               ProtocolExtensionContainer { { GANSS-ALM-ReducedKeplerianSet-ExtIEs } }
   ie-Extensions
                                                                                                                        OPTIONAL,
GANSS-ALM-ReducedKeplerianSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
GANSS-Auxiliary-Information ::= CHOICE {
               GANSS-AuxInfoGANSS-ID1,
    qanssID1
                                           -- This choice may only be present if GANSS ID indicates Modernized GPS
    ganssID3
               GANSS-AuxInfoGANSS-ID3,
                                           -- This choice may only be present if GANSS ID indicates GLONASS
    . . .
GANSS-AuxInfoGANSS-ID1 ::= SEQUENCE (SIZE(1.. maxGANSSSat)) OF GANSS-AuxInfoGANSS-ID1-element
GANSS-AuxInfoGANSS-ID1-element ::= SEQUENCE {
    svID
                       INTEGER (0..63),
    signalsAvailable BIT STRING (SIZE(8)),
    ie-Extensions
                       ProtocolExtensionContainer { { GANSS-AuxInfoGANSS-ID1-element-ExtIEs } } OPTIONAL,
GANSS-AuxInfoGANSS-ID1-element-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-AuxInfoGANSS-ID3 ::= SEOUENCE (SIZE(1.. maxGANSSSat)) OF GANSS-AuxInfoGANSS-ID3-element
GANSS-AuxInfoGANSS-ID3-element ::= SEQUENCE {
    svID
                       INTEGER (0..63),
    signalsAvailable BIT STRING (SIZE(8)),
    channelNumber
                       INTEGER (-7..13),
                       ProtocolExtensionContainer { { GANSS-AuxInfoGANSS-ID3-element-ExtIEs } } OPTIONAL,
    ie-Extensions
```

```
GANSS-AuxInfoGANSS-ID3-element-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-AuxInfoReg ::= BOOLEAN
GANSS-Clock-Model ::= SEQUENCE (SIZE (1..maxGANSSClockMod)) OF GANSS-SatelliteClockModelItem
GANSS-CNAVclockModel ::= SEQUENCE {
                      BIT STRING (SIZE (11)),
   cnavToc
   cnavTop
                      BIT STRING (SIZE (11)).
                     BIT STRING (SIZE (5)),
   cnavURA0
   cnavURA1
                      BIT STRING (SIZE (3)),
   cnavURA2
                      BIT STRING (SIZE (3)),
   cnavAf2
                      BIT STRING (SIZE (10)),
   cnavAf1
                      BIT STRING (SIZE (20)),
    cnavAf0
                      BIT STRING (SIZE (26)),
   cnavTqd
                      BIT STRING (SIZE (13)),
    cnavISCl1cp
                                                                                     OPTIONAL,
                      BIT STRING (SIZE (13))
                                                                                     OPTIONAL,
    cnavISCl1cd
                       BIT STRING (SIZE (13))
    cnavISCl1ca
                                                                                     OPTIONAL,
                       BIT STRING (SIZE (13))
   cnavISC12c
                       BIT STRING (SIZE (13))
                                                                                     OPTIONAL,
   cnavISC15i5
                       BIT STRING (SIZE (13))
                                                                                     OPTIONAL,
    cnavISC15q5
                      BIT STRING (SIZE (13))
                                                                                     OPTIONAL,
   ie-Extensions
                       ProtocolExtensionContainer { { GANSS-CNAVclockModel-ExtIEs } } OPTIONAL,
GANSS-CNAVclockModel-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Common-Data ::= SEQUENCE {
   ganss-Ionospheric-Model
                                      GANSS-Ionospheric-Model
   OPTIONAL,
   ganss-Rx-Pos
                                      GANSS-RX-Pos
   OPTIONAL,
   ie-Extensions
                                      OPTIONAL,
GANSS-Common-Data-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-GANSS-Additional-Ionospheric-Model
                                                  CRITICALITY ignore EXTENSION GANSS-Additional-Ionospheric-Model
                                                                                                                    PRESENCE optional }
                                                                                                                    PRESENCE optional },
    { ID id-GANSS-Earth-Orientation-Parameters
                                                  CRITICALITY ignore EXTENSION GANSS-Earth-Orientation-Parameters
GANSS-CommonDataInfoReq ::= SEQUENCE {
   ionospheric-Model
                                      BOOLEAN
   OPTIONAL,
    ie-Extensions
                                      ProtocolExtensionContainer { GANSS-CommonDataInfoReq-ExtIEs } }
                                                                                                                OPTIONAL.
    . . .
```

```
GANSS-CommonDataInfoReq-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-AddIonoModelReg
                                      CRITICALITY ignore EXTENSION
                                                                    GANSS-AddIonoModelReg
    PRESENCE
              optional} |
    {ID id-GANSS-EarthOrientParaReg
                                      CRITICALITY ignore EXTENSION
                                                                    GANSS-EarthOrientParaReg
                                                                                                                                 optional } ,
                                                                                                                  PRESENCE
GANSS-Data-Bit-Assistance ::= SEQUENCE {
                                      INTEGER (0..59,...),
   ganssTod
   dataBitAssistancelist
                                      GANSS-DataBitAssistanceList,
   ie-Extensions
                                      ProtocolExtensionContainer { GANSS-Data-Bit-Assistance-ExtIEs } }
                                                                                                              OPTIONAL,
GANSS-Data-Bit-Assistance-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-DataBitAssistanceList ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF GANSS-DataBitAssistanceItem
GANSS-DataBitAssistanceItem ::= SEQUENCE {
   sat.Id
                                  INTEGER (0..63),
   dataBitAssistanceSgnList
                                  GANSS-DataBitAssistanceSgnList,
   ie-Extensions
                                  ProtocolExtensionContainer { GANSS-DataBitAssistanceItem-ExtIEs } }
                                                                                                              OPTIONAL,
GANSS-DataBitAssistanceItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-DataBitAssistanceSqnList ::= SEQUENCE (SIZE (1..maxSqnType)) OF GANSS-DataBitAssistanceSqnItem
GANSS-DataBitAssistanceSgnItem ::= SEQUENCE
   ganss-SignalId
                          GANSS-Signal-ID,
                          BIT STRING (SIZE (1..1024)),
   ganssDataBits
   ie-Extensions
                          OPTIONAL,
GANSS-DataBitAssistanceSqnItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Data-Bit-Assistance-ReqItem ::= SEQUENCE {
   ganssTod
                                          INTEGER (0..86399),
```

```
ganss-Data-Bit-Assistance-RegList
                                       GANSS-Data-Bit-Assistance-RegList,
   iE-Extensions
                                       ProtocolExtensionContainer { { GANSS-Data-Bit-Assistance-RegItem-ExtIEs } } OPTIONAL,
GANSS-Data-Bit-Assistance-RegItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Data-Bit-Assistance-RegList ::= SEQUENCE {
   dGANSS-Signal-ID
                     BIT STRING (SIZE (8)),
   ganss-DataBitInterval
                                   INTEGER(0..15),
   ganss-SatelliteInfo
                                    SEQUENCE (SIZE (1..maxGANSSSat)) OF INTEGER(0..63)
      OPTIONAL.
                                    iE-Extensions
                                                                                                                          OPTIONAL,
GANSS-Data-Bit-Assistance-RegList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-DeltaUT1 ::= SEOUENCE {
   b1 BIT STRING (SIZE(11)),
       BIT STRING (SIZE(10)),
   ie-Extensions ProtocolExtensionContainer { GANSS-DeltaUT1-ExtIEs } }
                                                                            OPTIONAL,
GANSS-DeltaUT1-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Earth-Orientation-Parameters ::= SEQUENCE {
             BIT STRING (SIZE (16)),
   pmX
                    BIT STRING (SIZE (21)),
   pmXdot
                   BIT STRING (SIZE (15)),
   Ymq
                   BIT STRING (SIZE (21)),
   pmYdot
                  BIT STRING (SIZE (15)),
               BIT STRING (SIZE (31)),
BIT STRING (SIZE (19)),
   deltaUT1
   deltaUT1dot
   ie-Extensions
                  ProtocolExtensionContainer { GANSS-Earth-Orientation-Parameters-ExtIEs } }
                                                                                                         OPTIONAL,
GANSS-Earth-Orientation-Parameters-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-EarthOrientParaReg ::= BOOLEAN
GANSS-GenericDataInfoReqList ::= SEQUENCE (SIZE(1..maxNoGANSS)) OF GANSS-GenericDataInfoReqItem
```

```
GANSS-GenericDataInfoRegItem ::= SEQUENCE {
   ganss-Id
                                               GANSS-ID
       OPTIONAL.
    ganss-Navigation-Model-And-Time-Recovery
                                               BOOLEAN
                                                                                                                                    OPTIONAL,
    ganss-Time-Model-GNSS-GNSS
                                               BIT STRING (SIZE (9))
                                                                                                                                    OPTIONAL.
   ganss-UTC-Model
                                                                                                                                    OPTIONAL,
                                               BOOLEAN
    ganss-Almanac
                                               BOOLEAN
                                                                                                                                    OPTIONAL,
    ganss-Real-Time-Integrity
                                               BOOLEAN
                                                                                                                                    OPTIONAL,
   ganss-Data-Bit-Assistance-Reg
                                               GANSS-Data-Bit-Assistance-RegItem
                                                                                                                                    OPTIONAL,
                                               ProtocolExtensionContainer { GANSS-GenericDataInfoReqItem-ExtIEs } }
    ie-Extensions
                                                                                                                             OPTIONAL,
GANSS-GenericDataInfoReqItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-AddNavigationModelsReg CRITICALITY ignore EXTENSION
                                                                      GANSS-AddNavigationModelsReg
    PRESENCE
               optional} |
    {ID id-GANSS-AddUTCModelsReq
                                       CRITICALITY ignore EXTENSION
                                                                      GANSS-AddUTCModelsReq
    PRESENCE
               optional} |
    {ID id-GANSS-AuxInfoReq
                                       CRITICALITY ignore EXTENSION
                                                                      GANSS-AuxInfoReq
    PRESENCE
               optional} |
-- The following IE shall be present if "GANSS-ID" in "GANSS-GenericDataInfoRegItem" is "0" (SBAS)
    {ID id-GANSS-SBAS-ID
                                       CRITICALITY ignore EXTENSION
                                                                      GANSS-SBAS-ID
                                                                                                                  PRESENCE
                                                                                                                             optional } ,
GANSS-Generic-Data ::= SEQUENCE (SIZE(1..maxNoGANSS)) OF GANSS-Generic-DataItem
GANSS-Generic-DataItem ::= SEQUENCE {
   ganss-Id
                                               GANSS-ID
       OPTIONAL,
    dganss-Correction
                                               DGANSSCorrections
       OPTIONAL,
   ganss-Navigation-Model-And-Time-Recovery
                                               GANSS-Navigation-Model-And-Time-Recovery
       OPTIONAL,
                                               GANSS-Time-Model
   ganss-Time-Model
       OPTIONAL,
                                               GANSS-UTC-Model
    ganss-UTC-TIME
       OPTIONAL,
    ganss-Almanac
                                               GANSS-Almanac
       OPTIONAL,
    ganss-Real-Time-Integrity
                                               GANSS-Real-Time-Integrity
       OPTIONAL,
    ganss-Data-Bit-Assistance
                                               GANSS-Data-Bit-Assistance
       OPTIONAL,
                                               ie-Extensions
                                                                                                                             OPTIONAL,
GANSS-Generic-DataItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-GANSS-Additional-Time-Models
                                                   CRITICALITY ignore EXTENSION GANSS-Additional-Time-Models
                                                                                                                             PRESENCE optional }
```

```
ID id-GANSS-Additional-Navigation-Models
                                                    CRITICALITY ignore EXTENSION GANSS-Additional-Navigation-Models
                                                                                                                         PRESENCE optional }
    { ID id-GANSS-Additional-UTC-Models
                                                    CRITICALITY ignore EXTENSION GANSS-Additional-UTC-Models
                                                                                                                                        PRESENCE
optional }|
    { ID id-GANSS-Auxiliary-Information
                                                    CRITICALITY ignore EXTENSION GANSS-Auxiliary-Information
                                                                                                                                        PRESENCE
optional }|
    -- The following element shall be present if "GANSS-ID" in "GANSS-Generic-DataItem" is "0" ("SBAS")
    { ID id-GANSS-SBAS-ID
                                                    CRITICALITY ignore EXTENSION GANSS-SBAS-ID
                                                                                                                         PRESENCE optional },
GANSS-GLONASSclockModel ::= SEOUENCE {
    qloTau
                           BIT STRING (SIZE (22)),
    qloGamma
                           BIT STRING (SIZE (11)),
    gloDeltaTau
                           BIT STRING (SIZE (5))
                                                                                                 OPTIONAL,
    ie-Extensions
                           ProtocolExtensionContainer { { GANSS-GLONASSclockModel-ExtIEs } }
                                                                                                OPTIONAL,
GANSS-GLONASSclockModel-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-ID ::= INTEGER(0..7,...)
GANSS-Information ::= SEQUENCE {
    gANSS-CommonDataInfoReg
                                        GANSS-CommonDataInfoReg
                                                                                                                         OPTIONAL,
    gANSS-GenericDataInfoReqList
                                        GANSS-GenericDataInfoReqList
                                                                                                                         OPTIONAL,
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-Information-ExtIEs } }
                                                                                                                     OPTIONAL,
GANSS-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Ionospheric-Model ::= SEQUENCE {
    alpha-zero-ionos
                                        BIT STRING (SIZE (12)),
    alpha-one-ionos
                                        BIT STRING (SIZE (12)),
    alpha-two-ionos
                                        BIT STRING (SIZE (12)),
    gANSS-IonosphereRegionalStormFlags GANSS-IonosphereRegionalStormFlags
                                                                                                                     OPTIONAL,
                                        ProtocolExtensionContainer { { GANSS-Ionospheric-Model-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL,
GANSS-Ionospheric-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-IonosphereRegionalStormFlags ::= SEQUENCE {
```

```
storm-flaq-one
                                        BOOLEAN
    storm-flag-two
                                        BOOLEAN
    storm-flag-three
                                        BOOLEAN
    storm-flag-four
                                        BOOLEAN
    storm-flag-five
                                        BOOLEAN,
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-IonosphereRegionalStormFlags-ExtIEs } } OPTIONAL,
GANSS-IonosphereRegionalStormFlags-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-KeplerianParametersAlm ::= SEQUENCE
                                        INTEGER (0..255),
    iod-a
                                        INTEGER (0..3),
    qANSS-SatelliteInformationKP
                                        GANSS-SatelliteInformationKP,
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-KeplerianParametersAlm-ExtIEs } }
                                                                                                                          OPTIONAL,
    . . .
GANSS-KeplerianParametersAlm-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-KeplerianParametersOrb ::= SEQUENCE {
    toe-nav
                                        BIT STRING (SIZE (14)),
    ganss-omega-nav
                                        BIT STRING (SIZE (32)),
    delta-n-nav
                                        BIT STRING (SIZE (16)),
    m-zero-nav
                                        BIT STRING (SIZE (32)),
    omegadot-nav
                                        BIT STRING (SIZE (24)),
    qanss-e-nav
                                        BIT STRING (SIZE (32)),
    idot-nav
                                        BIT STRING (SIZE (14)),
    a-sqrt-nav
                                        BIT STRING (SIZE (32)),
                                        BIT STRING (SIZE (32)),
    i-zero-nav
    omega-zero-nav
                                        BIT STRING (SIZE (32)),
    c-rs-nav
                                        BIT STRING (SIZE (16)),
    c-is-nav
                                        BIT STRING (SIZE (16)),
    c-us-nav
                                        BIT STRING (SIZE (16)),
    c-rc-nav
                                        BIT STRING (SIZE (16)),
    c-ic-nav
                                        BIT STRING (SIZE (16)),
    c-uc-nav
                                        BIT STRING (SIZE (16)),
                                        ProtocolExtensionContainer { GANSS-KeplerianParametersOrb-ExtIEs } }
    ie-Extensions
                                                                                                                          OPTIONAL,
    . . .
GANSS-KeplerianParametersOrb-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
GANSS-NAVclockModel ::= SEOUENCE {
   navToc
                        BIT STRING (SIZE (16)),
   navaf2
                         BIT STRING (SIZE (8)),
   navaf1
                        BIT STRING (SIZE (16)),
   navaf0
                        BIT STRING (SIZE (22)),
   navTqd
                        BIT STRING (SIZE (8)),
   ie-Extensions
                        ProtocolExtensionContainer { GANSS-NAVclockModel-ExtIEs } }
GANSS-NAVclockModel-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Navigation-Model-And-Time-Recovery ::= SEQUENCE {
                              GANSS-Transmission-Time,
   ganss-Transmission-Time
                               ENUMERATED { true }
   non-broadcastIndication
                                                      OPTIONAL.
   ganssSatInfoNav
                              GANSS-Sat-Info-Nav,
   ie-Extensions
                              ProtocolExtensionContainer { GANSS-Navigation-Model-And-Time-Recovery-ExtIEs } } OPTIONAL,
    . . .
GANSS-Navigation-Model-And-Time-Recovery-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-CNAVKeplerianSet ::= SEQUENCE {
   cnavTop
                        BIT STRING (SIZE (11)),
   cnavURAindex
                        BIT STRING (SIZE (5)),
   cnavDeltaA
                        BIT STRING (SIZE (26)),
   cnavAdot
                         BIT STRING (SIZE (25)),
   cnavDeltaNo
                         BIT STRING (SIZE (17)),
                   BIT STRING (SIZE (23)),
    cnavDeltaNoDot
   cnavMo
                          BIT STRING (SIZE (33)),
   cnavE
                          BIT STRING (SIZE (33)),
                          BIT STRING (SIZE (33)),
    cnav0mega
   cnavOMEGA0
                          BIT STRING (SIZE (33)),
    cnavDeltaOmegaDot
                          BIT STRING (SIZE (17)),
   cnavIo
                          BIT STRING (SIZE (33)),
   cnavIoDot
                          BIT STRING (SIZE (15)),
   cnavCis
                          BIT STRING (SIZE (16)),
   cnavCic
                          BIT STRING (SIZE (16)),
   cnavCrs
                          BIT STRING (SIZE (24)),
   cnavCrc
                          BIT STRING (SIZE (24)),
    cnavCus
                          BIT STRING (SIZE (21)),
   cnavCuc
                          BIT STRING (SIZE (21)),
   ie-Extensions
                           ProtocolExtensionContainer { { GANSS-NavModel-CNAVKeplerianSet-ExtIEs } }
                                                                                                                OPTIONAL,
```

```
GANSS-NavModel-CNAVKeplerianSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-GLONASSecef ::= SEQUENCE {
    gloEn
           BIT STRING (SIZE (5)),
                       BIT STRING (SIZE(2)),
BIT STRING (SIZE (1)),
    gloP1
    aloP2
                          BIT STRING (SIZE (2))
    qloM
    OPTIONAL,
    aloX
                            BIT STRING (SIZE (27)),
    aloXdot
                            BIT STRING (SIZE (24)),
    gloXdotdot
                            BIT STRING (SIZE (5)),
    qloY
                            BIT STRING (SIZE (27)),
                     BIT STRING (SIZE (24)),
BIT STRING (SIZE (5)),
BIT STRING (SIZE (27)),
BIT STRING (SIZE (24)),
    gloYdot
    gloYdotdot
    qloZ
    gloZdot
    gloZdotdot
                            BIT STRING (SIZE (5)),
                            ProtocolExtensionContainer { { GANSS-NavModel-GLONASSecef-ExtIEs } }
    ie-Extensions
                                                                                                                        OPTIONAL,
    . . .
GANSS-NavModel-GLONASSecef-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-NAVKeplerianSet ::= SEQUENCE {
                BIT STRING (SIZE (4)),
    navFitFlag
                         BIT STRING (SIZE (1)),
                         BIT STRING (SIZE (16)),
    navToe
                        BIT STRING (SIZE (32)),
BIT STRING (SIZE (16)),
    nav0meqa
    navDeltaN
    navM0
                          BIT STRING (SIZE (32)),
                      BIT STRING (SIZE (24)),
    navOmegaADot
                          BIT STRING (SIZE (32)),
    navE
    navIDot
                          BIT STRING (SIZE (14)),
    navAPowerHalf
                            BIT STRING (SIZE (32)),
    navI0
                            BIT STRING (SIZE (32)),
    navOmegaA0
                            BIT STRING (SIZE (32)),
    navCrs
                            BIT STRING (SIZE (16)),
    navCis
                            BIT STRING (SIZE (16)),
    navCus
                            BIT STRING (SIZE (16)),
    navCrc
                            BIT STRING (SIZE (16)),
    navCic
                            BIT STRING (SIZE (16)),
    navCuc
                            BIT STRING (SIZE (16)),
                            ProtocolExtensionContainer { GANSS-NavModel-NAVKeplerianSet-ExtIEs } }
    ie-Extensions
                                                                                                                        OPTIONAL,
```

```
GANSS-NavModel-NAVKeplerianSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-SBASecef ::= SEQUENCE {
    -- The following IE shall be present if "GANSS-SBASclockModel" in "GANSS-AddClockModels" is not included in "Ganss-Sat-Info-AddNavList"
    sbasTo
                           BIT STRING (SIZE (13))
                                                                                                 OPTIONAL,
    sbasAccuracy
                           BIT STRING (SIZE (4)),
    sbasXq
                           BIT STRING (SIZE (30)),
    sbasYq
                           BIT STRING (SIZE (30)),
    sbasZq
                          BIT STRING (SIZE (25)),
    sbasXqDot
                         BIT STRING (SIZE (17)),
                          BIT STRING (SIZE (17)),
    sbasYqDot
    sbasZqDot
                           BIT STRING (SIZE (18)),
    sbasXgDotDot
                           BIT STRING (SIZE (10)),
    sbagYgDotDot
                           BIT STRING (SIZE (10)),
    sbasZqDotDot
                           BIT STRING (SIZE (10)),
                            ProtocolExtensionContainer { GANSS-NavModel-SBASecef-ExtIEs } }
    ie-Extensions
                                                                                                OPTIONAL,
GANSS-NavModel-SBASecef-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Orbit-Model ::= CHOICE {
    qANSS-keplerianParameters
                                        GANSS-KeplerianParametersOrb,
GANSS-Real-Time-Integrity ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF GANSS-RealTimeInformationItem
GANSS-RealTimeInformationItem ::= SEQUENCE {
    bad-ganss-satId
                                        INTEGER (0..63),
    bad-ganss-signalId
                                        BIT STRING(SIZE(8))
                                                                                                                     OPTIONAL.
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-RealTimeInformationItem-ExtIEs } }
                                                                                                                     OPTIONAL,
GANSS-RealTimeInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    . . .
GANSS-RX-Pos ::= SEQUENCE {
    latitudeSign
                                        ENUMERATED{north, south},
    degreesOfLatitude
                                        INTEGER (0..2147483647),
    degreesOfLongitude
                                        INTEGER (-2147483648..2147483647),
    directionOfAltitude
                                        ENUMERATED{height,depth},
```

```
altitude
                                        INTEGER (0..32767),
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-RX-Pos-ExtIEs } } OPTIONAL,
GANSS-RX-Pos-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SatelliteClockModelItem ::= SEQUENCE {
                                        BIT STRING (SIZE (14)),
    a-i2
                                        BIT STRING (SIZE (12)),
    a-i1
                                        BIT STRING (SIZE (18)),
    a-i0
                                        BIT STRING (SIZE (28)),
    t-qd
                                        BIT STRING (SIZE (10))
                                                                                                                     OPTIONAL,
    model-id
                                        INTEGER (0..1,...)
                                                                                                                     OPTIONAL,
                                        ProtocolExtensionContainer { { GANSS-SatelliteClockModelItem-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL,
    . . .
GANSS-SatelliteClockModelItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
GANSS-SatelliteInformationKP ::= SEQUENCE (SIZE (1..maxGANSSSatAlmanac)) OF GANSS-SatelliteInformationKPItem
GANSS-SatelliteInformationKPItem ::= SEQUENCE {
    satId
                                        INTEGER (0..63),
    ganss-e-alm
                                        BIT STRING (SIZE (11)),
    ganss-delta-I-alm
                                        BIT STRING (SIZE (11)),
    ganss-omegadot-alm
                                        BIT STRING (SIZE (11)),
    ganss-svhealth-alm
                                        BIT STRING (SIZE (4)),
    ganss-delta-a-sqrt-alm
                                        BIT STRING (SIZE (17)),
    ganss-omegazero-alm
                                        BIT STRING (SIZE (16)),
    ganss-m-zero-alm
                                        BIT STRING (SIZE (16)),
    ganss-omega-alm
                                        BIT STRING (SIZE (16)),
    ganss-af-zero-alm
                                        BIT STRING (SIZE (14)),
    ganss-af-one-alm
                                        BIT STRING (SIZE (11)),
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-SatelliteInformationKPItem-ExtIEs } } OPTIONAL,
GANSS-SatelliteInformationKPItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Ganss-Sat-Info-AddNavList ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF SEQUENCE {
```

```
satId
                                   INTEGER (0..63),
    svHealth
                                   BIT STRING (SIZE (6)),
    iod
                                   BIT STRING (SIZE (11)),
    ganssAddClockModels
ganssAddOrbitModels
                                   GANSS-AddClockModels,
                                   GANSS-AddOrbitModels,
                                   ProtocolExtensionContainer { { Ganss-Sat-Info-AddNavList-ExtIEs } } OPTIONAL,
    ie-Extensions
Ganss-Sat-Info-AddNavList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-GLOkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF GANSS-SAT-Info-Almanac-GLOkp
GANSS-SAT-Info-Almanac-GLOkp ::= SEQUENCE {
    qloAlmNA
                              BIT STRING (SIZE(11)),
    qloAlmnA
                              BIT STRING (SIZE(5)),
    qloAlmHA
                            BIT STRING (SIZE(5)),
   gloAlmLambdaA BIT STRING (SIZE(21)),
gloAlmTlambdaA BIT STRING (SIZE(21)),
gloAlmDeltaIA BIT STRING (SIZE(18)),
gloAlmDeltaTA BIT STRING (SIZE(22)),
gloAlmDeltaTdotA BIT STRING (SIZE(7)),
gloAlmEpsilonA BIT STRING (SIZE(15)),
    gloAlmLambdaA
                            BIT STRING (SIZE(21)),
    qloAlmOmeqaA
                              BIT STRING (SIZE(16)),
    qloAlmTauA
                              BIT STRING (SIZE(10)),
    qloAlmCA
                              BIT STRING (SIZE(1)),
    qloAlmMA
                              BIT STRING (SIZE(2))
    OPTIONAL,
    ie-Extensions
                              ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-GLOkp-ExtIEs } }
                                                                                                                                 OPTIONAL,
GANSS-SAT-Info-Almanac-GLOkp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-MIDIkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF GANSS-SAT-Info-Almanac-MIDIkp
GANSS-SAT-Info-Almanac-MIDIkp ::= SEQUENCE {
    svID
              INTEGER (0..63),
    midiAlmE
                              BIT STRING (SIZE (11)),
                           BIT STRING (SIZE (11)),
    midiAlmDeltaI
    midiAlmOmegaDot
                              BIT STRING (SIZE (11)),
    midiAlmSqrtA
                              BIT STRING (SIZE (17)),
    midiAlmOmega0
                              BIT STRING (SIZE (16)),
    midiAlmOmega
                              BIT STRING (SIZE (16)),
    midiAlmMo
                              BIT STRING (SIZE (16)),
    midiAlmaf0
                              BIT STRING (SIZE (11)),
    midiAlmaf1
                              BIT STRING (SIZE (10)),
```

```
midiAlmL1Health
                           BIT STRING (SIZE (1)),
    midiAlmL2Health
                           BIT STRING (SIZE (1)),
    midiAlmL5Health
                           BIT STRING (SIZE (1)),
    ie-Extensions
                           ProtocolExtensionContainer { { GANSS-SAT-Info-Almanac-MIDIkp-ExtIEs } }
                                                                                                                   OPTIONAL.
GANSS-SAT-Info-Almanac-MIDIkp-ExtIES NBAP-PROTOCOL-EXTENSION ::=
GANSS-SAT-Info-Almanac-NAVkpList ::= SEOUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF GANSS-SAT-Info-Almanac-NAVkp
GANSS-SAT-Info-Almanac-NAVkp ::= SEQUENCE {
                           INTEGER (0..63),
    svID
   navAlmE
                           BIT STRING (SIZE (16)),
    navAlmDeltaI
                         BIT STRING (SIZE (16)),
   navAlmOMEGADOT
                         BIT STRING (SIZE (16)),
    navAlmSVHealth
                        BIT STRING (SIZE (8)),
    navAlmSqrtA
                         BIT STRING (SIZE (24)),
    navAlmOMEGAo
                           BIT STRING (SIZE (24)),
    navAlmOmega
                           BIT STRING (SIZE (24)),
    navAlmMo
                           BIT STRING (SIZE (24)),
    navAlmaf0
                           BIT STRING (SIZE (11)),
    navAlmaf1
                           BIT STRING (SIZE (11)),
                           ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-NAVkp-ExtIEs } }
    ie-Extensions
                                                                                                                   OPTIONAL,
GANSS-SAT-Info-Almanac-NAVkp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-REDkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF GANSS-SAT-Info-Almanac-REDkp
GANSS-SAT-Info-Almanac-REDkp ::= SEQUENCE {
    svID
                           INTEGER (0..63),
    redAlmDeltaA
                           BIT STRING (SIZE (8)),
    redAlmOmega0
                           BIT STRING (SIZE (7)),
    redAlmPhi0
                           BIT STRING (SIZE (7)),
    redAlmL1Health
                           BIT STRING (SIZE (1)),
    redAlmL2Health
                           BIT STRING (SIZE (1)),
    redAlmL5Health
                           BIT STRING (SIZE (1)),
    ie-Extensions
                           ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-REDkp-ExtIEs } }
                                                                                                                   OPTIONAL,
GANSS-SAT-Info-Almanac-REDkp-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
```

```
GANSS-SAT-Info-Almanac-SBASecefList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF GANSS-SAT-Info-Almanac-SBASecef
GANSS-SAT-Info-Almanac-SBASecef ::= SEQUENCE {
    sbasAlmDataID
                    BIT STRING (SIZE(2)),
    svID
                           INTEGER (0..63),
    sbasAlmHealth
                           BIT STRING (SIZE(8)),
    sbasAlmXq
                           BIT STRING (SIZE(15)),
    sbasAlmYq
                         BIT STRING (SIZE(15)),
    sbasAlmZq
                          BIT STRING (SIZE(9)),
    sbasAlmXqdot
                         BIT STRING (SIZE(3)),
    sbasAlmYqDot
                           BIT STRING (SIZE(3)),
    sbasAlmZqDot
                           BIT STRING (SIZE(4)),
    sbasAlmTo
                           BIT STRING (SIZE(11)),
                           ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-SBASecef-ExtIEs } }
    ie-Extensions
                                                                                                                  OPTIONAL,
GANSS-SAT-Info-Almanac-SBASecef-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Sat-Info-Nav ::= SEQUENCE (SIZE(1..maxGANSSSat)) OF SEQUENCE {
                               INTEGER (0..63),
    svHealth
                               BIT STRING (SIZE(5)),
    iod
                               BIT STRING (SIZE(10)),
    ganssClockModel
                               GANSS-Clock-Model,
    ganssOrbitModel
                               GANSS-Orbit-Model,
                               ProtocolExtensionContainer { GANSS-Sat-Info-Nav-ExtIEs } } OPTIONAL,
    ie-Extensions
GANSS-Sat-Info-Nav-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SBAS-ID ::= ENUMERATED
                               waas,
                               egnos,
                               msas,
                               gagan,
GANSS-SBASclockModel ::= SEQUENCE {
```

```
sbasTo
                           BIT STRING (SIZE (13)),
    sbasAqfo
                          BIT STRING (SIZE (12)),
    sbasAqf1
                           BIT STRING (SIZE (8)),
    ie-Extensions
                           ProtocolExtensionContainer { { GANSS-SBASclockModel-ExtIEs } } OPTIONAL,
GANSS-SBASclockModel-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Signal-ID ::= INTEGER(0..7,...)
GANSS-StatusHealth ::= ENUMERATED {
  udre-scale-1dot0.
  udre-scale-0dot75,
  udre-scale-0dot5,
  udre-scale-0dot3,
  udre-scale-0dot2,
  udre-scale-0dot1,
  no-data,
  invalid-data
GANSS-Time-ID ::= INTEGER(0..7,...)
GANSS-Time-Model ::= SEQUENCE {
    ganss-time-model-Ref-Time
                                      INTEGER (0..37799),
   ganss-t-a0
                                       INTEGER (-2147483648.. 2147483647),
                                      INTEGER (-8388608.. 8388607)
                                                                                                                OPTIONAL,
   ganss-t-a1
    qanss-t-a2
                                      INTEGER (-64..63)
                                                                                                                OPTIONAL.
    gnss-to-id
                                      ENUMERATED{gps,...,galileo,qzss,glonass},
    ganss-wk-number
                                      INTEGER (0..8191)
                                                                                                                OPTIONAL,
                                      ie-Extensions
                                                                                                                OPTIONAL,
GANSS-Time-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Transmission-Time ::= SEQUENCE {
    qanssDay
                               INTEGER (0..8191)
   OPTIONAL,
    ganssTod
                               INTEGER (0..86399),
                               ProtocolExtensionContainer { GANSS-Transmission-Time-ExtIEs } }
   ie-Extensions
   OPTIONAL,
```

1028

```
GANSS-Transmission-Time-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-UTC-Model ::= SEQUENCE {
                                      BIT STRING (SIZE (24)),
   a-one-utc
                                      BIT STRING (SIZE (32)),
   a-zero-utc
   t-ot-utc
                                      BIT STRING (SIZE (8)),
   w-n-t-utc
                                      BIT STRING (SIZE (8)),
                                      BIT STRING (SIZE (8)),
    delta-t-ls-utc
   w-n-lsf-utc
                                      BIT STRING (SIZE (8)),
                                      BIT STRING (SIZE (8)),
    delta-t-lsf-utc
                                      BIT STRING (SIZE (8)),
    ie-Extensions
                                      ProtocolExtensionContainer { { GANSS-UTC-Model-ExtIEs } }
                                                                                                                OPTIONAL,
GANSS-UTC-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-UTCmodelSet1 ::= SEOUENCE {
           BIT STRING (SIZE(16)),
   utcA0
   ut.cA1
                    BIT STRING (SIZE(13)),
    utcA2
                    BIT STRING (SIZE(7)),
    utcDeltaTls
                    BIT STRING (SIZE(8)),
    utcTot
                      BIT STRING (SIZE(16)),
   utcWNot
                    BIT STRING (SIZE(13)),
    utcWNlsf
                    BIT STRING (SIZE(8)),
    utcDN
                      BIT STRING (SIZE(4)),
    utcDeltaTlsf
                    BIT STRING (SIZE(8)),
    ie-Extensions
                   ProtocolExtensionContainer { GANSS-UTCmodelSet1-ExtIEs } }
                                                                                     OPTIONAL,
GANSS-UTCmodelSet1-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-UTCmodelSet2 ::= SEQUENCE {
                       BIT STRING (SIZE(11)),
    tauC
                      BIT STRING (SIZE(32)),
    deltaUT1
                     GANSS-DeltaUT1
                                                                                     OPTIONAL,
                      BIT STRING (SIZE(2))
                                                                                     OPTIONAL,
    ie-Extensions
                      ProtocolExtensionContainer { { GANSS-UTCmodelSet2-ExtIEs } }
                                                                                     OPTIONAL,
GANSS-UTCmodelSet2-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
GANSS-UTCmodelSet3 ::= SEQUENCE {
                      BIT STRING (SIZE(24)),
   utcA0wnt
                     BIT STRING (SIZE(32)),
   utcTot
                   BIT STRING (SIZE(8)),
   utcWNt
                    BIT STRING (SIZE(8)),
    utcDeltaTls
                      BIT STRING (SIZE(8)),
    utcWNlsf
                      BIT STRING (SIZE(8)),
    utcDN
                      BIT STRING (SIZE(8)),
    utcDeltaTlsf
                   BIT STRING (SIZE(8)),
    utcStandardID
                     BIT STRING (SIZE(3)),
    ie-Extensions
                      OPTIONAL,
GANSS-UTCmodelSet3-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GapLength
                      ::= INTEGER (1..14)
-- Unit slot
GapDuration
                      ::= INTEGER (1..144,...)
-- Unit frame
GenericTrafficCategory ::= BIT STRING (SIZE (8))
GPS-Almanac ::= SEQUENCE {
    wn₃-alm
                       BIT STRING (SIZE (8)),
   sat-info-almanac
                       SAT-Info-Almanac,
    sVGlobalHealth-alm BIT STRING (SIZE (364)) OPTIONAL,
                       ProtocolExtensionContainer { { GPS-Almanac-ExtIEs} }
    ie-Extensions
                                                                               OPTIONAL,
GPS-Almanac-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SAT-Info-Almanac-ExtItem
                                    CRITICALITY ignore
                                                            EXTENSION SAT-Info-Almanac-ExtList
                                                                                                                                optional},
                                                                                                                  PRESENCE
    . . .
GPS-Ionospheric-Model ::= SEQUENCE {
  alpha-zero-ionos
                       BIT STRING (SIZE (8)),
  alpha-one-ionos
                       BIT STRING (SIZE (8)),
  alpha-two-ionos
                       BIT STRING (SIZE (8)),
  alpha-three-ionos
                       BIT STRING (SIZE (8)),
  beta-zero-ionos
                       BIT STRING (SIZE (8)),
  beta-one-ionos
                       BIT STRING (SIZE (8)),
  beta-two-ionos
                       BIT STRING (SIZE (8)),
```

```
beta-three-ionos
                        BIT STRING (SIZE (8)),
  ie-Extensions
                        ProtocolExtensionContainer { { GPS-Ionospheric-Model-ExtIEs} }
                                                                                        OPTIONAL.
GPS-Ionospheric-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GPS-Information ::= SEQUENCE (SIZE (0..maxNoGPSItems)) OF GPS-Information-Item
-- This IE shall be present if the Information Type Item IE indicates "GPS Information"
GPS-Information-Item ::= ENUMERATED {
  gps-navigation-model-and-time-recovery,
  qps-ionospheric-model,
  qps-utc-model,
  qps-almanac,
  qps-rt-integrity,
GPS-RealTime-Integrity ::= CHOICE {
   bad-satellites
                              GPSBadSat-Info-RealTime-Integrity,
   no-bad-satellites
                              NULL
GPSBadSat-Info-RealTime-Integrity ::= SEQUENCE {
   sat-info
                                  SATInfo-RealTime-Integrity,
   ie-Extensions
                                  OPTIONAL,
GPSBadSat-Info-RealTime-Integrity-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
GPS-NavigationModel-and-TimeRecovery ::= SEQUENCE (SIZE (1..maxNoSat)) OF GPS-NavandRecovery-Item
GPS-NavandRecovery-Item ::= SEQUENCE {
 tx-tow-nav
                                 INTEGER (0..1048575),
 sat-id-nav
                                 SAT-ID,
 tlm-message-nav
                                 BIT STRING (SIZE (14)),
 tlm-revd-c-nav
                                 BIT STRING (SIZE (2)),
 ho-word-nav
                                 BIT STRING (SIZE (22)),
 w-n-nav
                                 BIT STRING (SIZE (10)),
 ca-or-p-on-12-nav
                                 BIT STRING (SIZE (2)),
 user-range-accuracy-index-nav
                                 BIT STRING (SIZE (4)),
 sv-health-nav
                                 BIT STRING (SIZE (6)),
```

1030

OPTIONAL,

```
iodc-nav
                                   BIT STRING (SIZE (10)),
 12-p-dataflag-nav
                                   BIT STRING (SIZE (1)),
  sf1-reserved-nav
                                   BIT STRING (SIZE (87)),
 t-qd-nav
                                   BIT STRING (SIZE (8)),
  t-oc-nav
                                   BIT STRING (SIZE (16)),
 a-f-2-nav
                                   BIT STRING (SIZE (8)),
 a-f-1-nav
                                   BIT STRING (SIZE (16)),
  a-f-zero-nav
                                   BIT STRING (SIZE (22)),
 c-rs-nav
                                   BIT STRING (SIZE (16)),
  delta-n-nav
                                   BIT STRING (SIZE (16)),
 m-zero-nav
                                   BIT STRING (SIZE (32)),
 c-uc-nav
                                   BIT STRING (SIZE (16)),
                                   BIT STRING (SIZE (32)),
  qps-e-nav
 c-us-nav
                                   BIT STRING (SIZE (16)),
  a-sgrt-nav
                                   BIT STRING (SIZE (32)),
  t-oe-nav
                                   BIT STRING (SIZE (16)),
  fit-interval-flag-nav
                                   BIT STRING (SIZE (1)),
  aodo-nav
                                   BIT STRING (SIZE (5)),
 c-ic-nav
                                   BIT STRING (SIZE (16)),
  omega-zero-nav
                                   BIT STRING (SIZE (32)),
 c-is-nav
                                   BIT STRING (SIZE (16)),
 i-zero-nav
                                   BIT STRING (SIZE (32)),
 c-rc-nav
                                   BIT STRING (SIZE (16)),
 qps-omega-nav
                                   BIT STRING (SIZE (32)),
 omegadot-nav
                                   BIT STRING (SIZE (24)),
  idot-nav
                                   BIT STRING (SIZE (14)),
  spare-zero-fill
                                   BIT STRING (SIZE (20)),
                                   ProtocolExtensionContainer { { GPS-NavandRecovery-Item-ExtIEs} }
 ie-Extensions
GPS-NavandRecovery-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GPS-RX-POS ::= SEQUENCE {
   latitudeSign
                            ENUMERATED {north, south},
   latitude
                            INTEGER (0..8388607),
    longitude
                            INTEGER (-8388608..8388607),
    directionOfAltitude
                            ENUMERATED {height, depth},
    altitude
                            INTEGER (0..32767),
                            ProtocolExtensionContainer { GPS-RX-POS-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
GPS-RX-POS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
GPS-Status-Health ::= ENUMERATED {
```

```
udre-scale-1dot0,
   udre-scale-0dot75,
   udre-scale-0dot5.
   udre-scale-0dot3,
   udre-scale-0dot1,
   no-data,
   invalid-data
GPSTOW ::= INTEGER (0..604799)
GPS-UTC-Model ::= SEQUENCE {
   a-one-utc
                         BIT STRING (SIZE (24)),
   a-zero-utc
                       BIT STRING (SIZE (32)),
  t-ot-utc BIT STRING (SIZE (8)), delta-t-ls-utc BIT STRING (SIZE (8)), w-n-t-utc BIT STRING (SIZE (8)), w-n-lsf-utc BIT STRING (SIZE (8)), dn-utc BIT STRING (SIZE (8)),
                     BIT STRING (SIZE (8)),
   delta-t-lsf-utc
   ie-Extensions
                          ProtocolExtensionContainer { { GPS-UTC-Model-ExtIEs} }
                                                                                        OPTIONAL,
   . . .
GPS-UTC-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- -----
HARO-Info-for-E-DCH ::= ENUMERATED {
    rv0,
    rvtable
HARQ-MemoryPartitioning ::= CHOICE {
    implicit
                    HARQ-MemoryPartitioning-Implicit,
    explicit
                    HARQ-MemoryPartitioning-Explicit,
    . . .
HARO-MemoryPartitioning-Implicit
                                   ::= SEQUENCE {
    number-of-Processes
                                 INTEGER (1..8,...,12 | 14 | 16),
                                 ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Implicit-ExtIEs } }
    iE-Extensions
                                                                                                                                     OPTIONAL,
HARQ-MemoryPartitioning-Implicit-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
HARO-MemoryPartitioning-Explicit
                                 ::= SEQUENCE {
   hARO-MemoryPartitioningList
                                     HARO-MemoryPartitioningList,
   iE-Extensions
                                     ProtocolExtensionContainer { { HARO-MemoryPartitioning-Explicit-ExtIEs } }
                                                                                                                               OPTIONAL.
HARQ-MemoryPartitioning-Explicit-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- The following IE may only be used in FDD, in MIMO dual stream transmission mode
   . . .
HARO-MemoryPartitioningList ::= SEQUENCE (SIZE (1..maxNrOfHAROProcesses)) OF HARO-MemoryPartitioningItem
HARQ-MemoryPartitioningInfoExtForMIMO ::= SEQUENCE (SIZE (4 | 6 | 8)) OF HARQ-MemoryPartitioningItem
HARO-MemoryPartitioningItem ::= SEQUENCE {
   process-Memory-Size
                                     ENUMERATED
                                     hms800, hms1600, hms2400, hms3200, hms4000,
                                     hms4800, hms5600, hms6400, hms7200, hms8000,
                                     hms8800, hms9600, hms10400, hms11200, hms12000,
                                     hms12800, hms13600, hms14400, hms15200, hms16000,
                                     hms17600, hms19200, hms20800, hms22400, hms24000,
                                     hms25600, hms27200, hms28800, hms30400, hms32000,
                                     hms36000, hms40000, hms44000, hms48000, hms52000,
                                     hms56000, hms60000, hms64000, hms68000, hms72000,
                                     hms76000, hms80000, hms88000, hms96000, hms104000,
                                     hms112000, hms120000, hms128000, hms136000, hms144000,
                                     hms152000, hms160000, hms176000, hms192000, hms208000,
                                     hms224000, hms240000, hms256000, hms272000, hms288000,
                                     hms304000,...},
                                     ProtocolExtensionContainer { { HARQ-MemoryPartitioningItem-ExtIEs } }
   iE-Extensions
                                                                                                                        OPTIONAL,
HARQ-MemoryPartitioningItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HARO-Preamble-Mode ::= ENUMERATED {
  mode0,
  mode1
HARQ-Process-Allocation-2ms-EDCH ::= BIT STRING ( SIZE(maxNrOfEDCHHARQProcesses2msEDCH) )
HARQ-Preamble-Mode-Activation-Indicator ::=ENUMERATED
   hargPreambleModeActivated
HSDPA-Capability ::= ENUMERATED {hsdpa-capable, hsdpa-non-capable}
HS-DSCHProvidedBitRate ::= SEQUENCE (SIZE (1..maxNrOfPriorityClasses)) OF HS-DSCHProvidedBitRate-Item
```

```
HS-DSCHProvidedBitRate-Item ::= SEQUENCE {
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    hS-DSCHProvidedBitRateValue
                                        HS-DSCHProvidedBitRateValue,
    iE-Extensions
                                        ProtocolExtensionContainer { { HS-DSCHProvidedBitRate-Item-ExtIEs} }
                                                                                                                         OPTIONAL.
HS-DSCHProvidedBitRate-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCHProvidedBitRateValue ::= INTEGER(0..16777215,...,16777216..256000000)
-- except for 7.68Mcps TDD Unit bit/s, Range 0..2^24-1..2^24..256,000,000, Step 1 bit
-- 7.68Mcps TDD Unit 2bit/s, Range 0..2^24-1..2^24..256,000,000, Step 1
HS-DSCHProvidedBitRateValueInformation-For-CellPortion ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF HS-
DSCHProvidedBitRateValueInformation-For-CellPortion-Item
HS-DSCHProvidedBitRateValueInformation-For-CellPortion-Item ::= SEQUENCE
    cellPortionID
                                    CellPortionID,
                                    HS-DSCHProvidedBitRate,
    hS-DSCHProvidedBitRateValue
                                    ProtocolExtensionContainer { {HS-DSCHProvidedBitRateValueInformation-For-CellPortion-Item-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
HS-DSCHProvidedBitRateValueInformation-For-CellPortion-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCHRequiredPower ::= SEQUENCE (SIZE (1..maxNrOfPriorityClasses)) OF HS-DSCHRequiredPower-Item
HS-DSCHRequiredPower-Item ::= SEQUENCE {
    schedulingPriorityIndicator
                                            SchedulingPriorityIndicator,
    hS-DSCHRequiredPowerValue
                                            HS-DSCHRequiredPowerValue,
    hS-DSCHRequiredPowerPerUEInformation
                                            HS-DSCHRequiredPowerPerUEInformation
                                                                                                                         OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-DSCHRequiredPower-Item-ExtIEs} }
                                                                                                                         OPTIONAL,
    . . .
HS-DSCHRequiredPower-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCHRequiredPowerValue ::= INTEGER(0..1000)
-- Unit %, Range 0 ..1000, Step 0.1%
HS-DSCHRequiredPowerPerUEInformation ::= SEQUENCE (SIZE (1.. maxNrOfContextsOnUeList)) OF HS-DSCHRequiredPowerPerUEInformation-Item
HS-DSCHRequiredPowerPerUEInformation-Item ::= SEQUENCE {
    cRNC-CommunicationContextID
                                            CRNC-CommunicationContextID,
```

```
hS-DSCHRequiredPowerPerUEWeight
                                            HS-DSCHRequiredPowerPerUEWeight
                                                                                 OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-DSCHRequiredPowerPerUEInformation-Item-ExtIEs} }
                                                                                                                                         OPTIONAL,
    . . .
HS-DSCHRequiredPowerPerUEInformation-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCHRequiredPowerPerUEWeight ::= INTEGER(0..100)
-- Unit %, Range 0 ..100, Step 1%
HS-DSCHRequiredPowerValueInformation-For-CellPortion ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF HS-DSCHRequiredPowerValueInformation-
For-CellPortion-Item
HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item ::= SEQUENCE{
    cellPortionID
                                CellPortionID,
    hS-DSCHRequiredPowerValue HS-DSCHRequiredPower,
                                ProtocolExtensionContainer { { HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
HSDPA-Associated-PICH-Information ::= CHOICE {
                                                     HSDPA-PICH-Shared-with-PCH,
    hsdpa-PICH-Shared-with-PCH
    hsdpa-PICH-notShared-with-PCH
                                                     HSDPA-PICH-notShared-with-PCH,
HSDPA-PICH-Shared-with-PCH ::= SEOUENCE {
    hsdpa-PICH-SharedPCH-ID
                                                     CommonPhysicalChannelID,
HSDPA-PICH-notShared-with-PCH ::= SEQUENCE {
                                                     CommonPhysicalChannelID,
    hSDPA-PICH-notShared-ID
    fdd-DL-Channelisation-CodeNumber
                                                     FDD-DL-ChannelisationCodeNumber,
    pich-Power
                                                     PICH-Power,
   pich-Mode
                                                     PICH-Mode,
    sttd-Indicator
                                                     STTD-Indicator,
HSDSCH-Common-System-InformationFDD ::= SEQUENCE {
    hsdsch-Common-Information
                                                     HSDSCH-Common-Information
                                                                                                                                  OPTIONAL,
    commonMACFlow-Specific-Information
                                                     CommonMACFlow-Specific-InfoList
                                                                                                                                  OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-Common-System-InformationFDD-ExtIEs } }
    OPTIONAL,
    . . .
```

```
HSDSCH-Common-System-InformationFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Common-System-Information-ResponseFDD ::= SEQUENCE
    hsSCCH-Specific-Information-ResponseFDD
                                                     HSSCCH-Specific-InformationRespListFDD
                                                                                                                          OPTIONAL,
    hARQ-MemoryPartitioning
                                                     HARQ-MemoryPartitioning
                                                                                                                          OPTIONAL,
    commonMACFlow-Specific-Info-Response
                                                     CommonMACFlow-Specific-InfoList-Response
                                                                                                                          OPTIONAL,
                                                     ProtocolExtensionContainer { { HSDSCH-Common-System-Information-ResponseFDD-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HSDSCH-Common-System-Information-ResponseFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Common-Information ::= SEQUENCE {
    cCCH-PriorityQueue-Id
                                                                     PriorityQueue-Id,
    sRB1-PriorityQueue-Id
                                                                     PriorityQueue-Id,
    associatedCommon-MACFlow
                                                                     Common-MACFlow-ID,
                                                                     FACH-Measurement-Occasion-Cycle-Length-Coefficient
    fACH-Measurement-Occasion-Cycle-Length-Coefficient
    OPTIONAL,
    rACH-Measurement-Result
                                                                     RACH-Measurement-Result,
    bCCH-Specific-HSDSCH-RNTI-Information
                                                                     BCCH-Specific-HSDSCH-RNTI-Information,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-Common-Information-ExtIEs} }
                                                                                                                          OPTIONAL,
HSDSCH-Common-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-FDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlows-Information
                                                HSDSCH-MACdFlows-Information.
    ueCapability-Info
                                                UE-Capability-Information,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                MAChsReorderingBufferSize-for-RLC-UM,
    cqiFeedback-CycleK
                                                COI-Feedback-Cycle,
    cqiRepetitionFactor
                                                CQI-RepetitionFactor
                                                                                             OPTIONAL,
    -- This IE shall be present if the CQI Feedback Cycle k is greater than 0
    ackNackRepetitionFactor
                                                AckNack-RepetitionFactor,
    cqiPowerOffset
                                                CQI-Power-Offset,
    ackPowerOffset
                                                Ack-Power-Offset,
    nackPowerOffset
                                                Nack-Power-Offset,
    hsscch-PowerOffset
                                                HSSCCH-PowerOffset
                                                                                             OPTIONAL,
    measurement-Power-Offset
                                                Measurement-Power-Offset
                                                                                             OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs} }
                                                                                                                          OPTIONAL,
    . . .
HSDSCH-FDD-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::=
```

```
{ ID id-HARQ-Preamble-Mode
                                                     CRITICALITY ignore
                                                                                          HARQ-Preamble-Mode
                                                                                                                                          PRESENCE
                                                                              EXTENSION
optional}|
    { ID id-MIMO-ActivationIndicator
                                                     CRITICALITY reject
                                                                              EXTENSION
                                                                                          MIMO-ActivationIndicator
                                                                                                                                          PRESENCE
optional}|
    { ID id-HSDSCH-MACdPDUSizeFormat
                                                     CRITICALITY reject
                                                                                          HSDSCH-MACdPDUSizeFormat
                                                                                                                                          PRESENCE
                                                                              EXTENSION
optional}|
      ID id-SixtyfourQAM-UsageAllowedIndicator
                                                     CRITICALITY ignore
                                                                              EXTENSION
                                                                                          SixtyfourQAM-UsageAllowedIndicator
                                                                                                                                  PRESENCE optional } |
      ID id-UE-with-enhanced-HS-SCCH-support-indicator CRITICALITY ignore
                                                                                  EXTENSION NULL
    PRESENCE optional } |
    { ID id-EnhancedHSServingCC-Abort
                                                                                          EnhancedHSServingCC-Abort
                                                     CRITICALITY reject
                                                                              EXTENSION
                                                                                                                                          PRESENCE
optional}|
    { ID id-UE-SupportIndicatorExtension
                                                     CRITICALITY ignore
                                                                                          UE-SupportIndicatorExtension
                                                                                                                                          PRESENCE
                                                                              EXTENSION
optional},
HSDSCH-TDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlows-Information
                                                 HSDSCH-MACdFlows-Information,
    ueCapability-Info
                                                 UE-Capability-Information,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                 MAChsReorderingBufferSize-for-RLC-UM,
    tDD-AckNack-Power-Offset
                                                 TDD-AckNack-Power-Offset,
                                                 ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs} }
    iE-Extensions
                                                                                                                           OPTIONAL,
HSDSCH-TDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-HSSICH-SIRTarget
                                                                                                                                  optional}|
                                     CRITICALITY ignore
                                                                 EXTENSION
                                                                                                                      PRESENCE
                                                                             UL-SIR
 -- Applicable to 1.28Mcps TDD only
    { ID id-HSSICH-TPC-StepSize
                                                                                                                                  optional}|
                                     CRITICALITY ignore
                                                                 EXTENSION
                                                                             TDD-TPC-UplinkStepSize-LCR
                                                                                                                      PRESENCE
     -- Applicable to 1.28Mcps TDD only
     ID id-HSDSCH-MACdPDUSizeFormat
                                        CRITICALITY reject
                                                                 EXTENSION
                                                                             HSDSCH-MACdPDUSizeFormat
                                                                                                                      PRESENCE optional | |
    { ID id-tSN-Length
                                     CRITICALITY reject
                                                                 EXTENSION TSN-Length
                                                                                                                      PRESENCE optional }
    -- Applicable for 1.28Mcps TDD when using multiple frequencies
         ID id-MIMO-ActivationIndicator
                                                         CRITICALITY reject
                                                                                             MIMO-ActivationIndicator
                                                                                  EXTENSION
    PRESENCE optional }.
HSDSCH-Information-to-Modify ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info-to-Modify
                                                     HSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                                      OPTIONAL,
    priorityQueueInfotoModify
                                                     PriorityOueue-InfoList-to-Modify
                                                                                                                      OPTIONAL,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                     MAChsReorderingBufferSize-for-RLC-UM
                                                                                                                      OPTIONAL,
    cgiFeedback-CycleK
                                                     CQI-Feedback-Cycle
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    cgiRepetitionFactor
                                                     COI-RepetitionFactor
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    ackNackRepetitionFactor
                                                     AckNack-RepetitionFactor
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    caiPowerOffset
                                                     COI-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    ackPowerOffset
                                                     Ack-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    nackPowerOffset
                                                     Nack-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    hsscch-PowerOffset
                                                     HSSCCH-PowerOffset
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    measurement-Power-Offset
                                                     Measurement-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    hSSCCHCodeChangeGrant
                                                     HSSCCH-Code-Change-Grant
                                                                                                                      OPTIONAL,
    tDDAckNackPowerOffset
                                                     TDD-AckNack-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For TDD only
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-ExtIEs} } 
                                                                                                                                          OPTIONAL,
```

```
HSDSCH-Information-to-Modify-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-HARO-Preamble-Mode
                                                 CRITICALITY ignore
                                                                                      HARO-Preamble-Mode
                                                                                                                      PRESENCE optional }
                                                                         EXTENSION
     ID id-HSSICH-SIRTarget
                                                 CRITICALITY ignore
                                                                                                                      PRESENCE optional)
                                                                         EXTENSION
                                                                                      UL-SIR
     -- Applicable to 1.28Mcps TDD only
     ID id-ueCapability-Info
                                                 CRITICALITY ignore
                                                                         EXTENSION
                                                                                      UE-Capability-Information
                                                                                                                      PRESENCE optional }
     ID id-HSSICH-TPC-StepSize
                                                 CRITICALITY ignore
                                                                         EXTENSION
                                                                                      TDD-TPC-UplinkStepSize-LCR
                                                                                                                      PRESENCE optional } |
     -- Applicable to 1.28Mcps TDD only
    { ID id-HS-PDSCH-Code-Change-Grant
                                                                                                                      PRESENCE optional } |
                                                 CRITICALITY ignore
                                                                         EXTENSION
                                                                                      HS-PDSCH-Code-Change-Grant
     -- Applicable to FDD only
     ID id-MIMO-Mode-Indicator
                                                 CRITICALITY reject
                                                                         EXTENSION
                                                                                      MIMO-Mode-Indicator
                                                                                                                      PRESENCE optional } |
      ID id-HSDSCH-MACdPDUSizeFormat
                                                 CRITICALITY reject
                                                                         EXTENSION
                                                                                      HSDSCH-MACdPDUSizeFormat
                                                                                                                      PRESENCE optional } |
      ID id-SixtyfourOAM-UsageAllowedIndicator CRITICALITY ignore
                                                                                      SixtyfourOAM-UsageAllowedIndicator
                                                                                                                                  PRESENCE optional }
                                                                         EXTENSION
      ID id-EnhancedHSServingCC-Abort
                                                 CRITICALITY reject
                                                                         EXTENSION
                                                                                      EnhancedHSServingCC-Abort
                                                                                                                                  PRESENCE optional }
      ID id-UE-SupportIndicatorExtension
                                                                                                                           PRESENCE optional },
                                                 CRITICALITY ignore
                                                                         EXTENSION
                                                                                      UE-SupportIndicatorExtension
HSDSCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-to-Modify
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    hsDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                                      OPTIONAL,
    transportBearerRequestIndicator
                                         TransportBearerRequestIndicator,
    bindingID
                                         BindingID
                                                                                      OPTIONAL,
    transportLayerAddress
                                         TransportLayerAddress
                                                                                      OPTIONAL,
                                         ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
                            CRITICALITY ignore
                                                                         PRESENCE optional },
    {ID id-TnlQos
                                                     EXTENSION TnlQos
    . . .
HSDSCH-MACdPDUSizeFormat ::= ENUMERATED {
    indexedMACdPDU-Size,
    flexibleMACdPDU-Size
HSDSCH-MACdPDU-SizeCapability ::= ENUMERATED {
    indexedSizeCapable,
    flexibleSizeCapable
HSDSCH-Information-to-Modify-Unsynchronised ::= SEQUENCE
    hsDSCH-MACdFlow-Specific-Info-to-Modify
                                                     HSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                                      OPTIONAL,
    priorityOueueInfotoModifyUnsynchronised
                                                     PriorityOueue-InfoList-to-Modify-Unsynchronised
                                                                                                                      OPTIONAL,
    cqiPowerOffset
                                                     COI-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    ackPowerOffset
                                                     Ack-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    nackPowerOffset
                                                     Nack-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
                                                     HSSCCH-PowerOffset
                                                                                                                                  -- For FDD only
    hsscch-PowerOffset
                                                                                                                      OPTIONAL,
```

```
tDDAckNackPowerOffset
                                                     TDD-AckNack-Power-Offset
                                                                                                                     OPTIONAL, -- For TDD only
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs} }
    OPTIONAL.
HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-HARO-Preamble-Mode
                                                CRITICALITY ignore
                                                                         EXTENSION
                                                                                     HARO-Preamble-Mode
                                                                                                                      PRESENCE optional }
     ID id-HSSICH-SIRTarget
                                                CRITICALITY ignore
                                                                         EXTENSION
                                                                                     III.-STR
                                                                                                                      PRESENCE optional } |
     -- Applicable to 1.28Mcps TDD only
     ID id-ueCapability-Info
                                                                                     UE-Capability-Information
                                                                                                                      PRESENCE optional }
                                                CRITICALITY ignore
                                                                         EXTENSION
                                                                                                                      PRESENCE optional
    { ID id-HSSICH-TPC-StepSize
                                                CRITICALITY ignore
                                                                         EXTENSION
                                                                                     TDD-TPC-UplinkStepSize-LCR
     -- Applicable to 1.28Mcps TDD only
     ID id-MIMO-Mode-Indicator
                                                CRITICALITY reject
                                                                         EXTENSION MIMO-Mode-Indicator
                                                                                                                      PRESENCE
                                                                                                                                 optional }|
      ID id-SixtyfourOAM-UsageAllowedIndicator CRITICALITY ignore
                                                                         EXTENSION
                                                                                     SixtyfourOAM-UsageAllowedIndicator
                                                                                                                                 PRESENCE optional }
      ID id-EnhancedHSServingCC-Abort
                                                CRITICALITY reject
                                                                         EXTENSION
                                                                                     EnhancedHSServingCC-Abort
                                                                                                                                 PRESENCE optional }
     ID id-UE-SupportIndicatorExtension
                                                CRITICALITY ignore
                                                                                     UE-SupportIndicatorExtension
                                                                                                                          PRESENCE optional },
                                                                         EXTENSION
HSDSCH-FDD-Information-Response ::= SEQUENCE
    hsDSCH-MACdFlow-Specific-InformationResp
                                                     HSDSCH-MACdFlow-Specific-InformationResp
    OPTIONAL,
    hsSCCH-Specific-Information-ResponseFDD
                                                     HSSCCH-Specific-InformationRespListFDD
    OPTIONAL,
    hARO-MemoryPartitioning
                                                     HARQ-MemoryPartitioning
    OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }
                                                                                                                                         OPTIONAL,
HSDSCH-FDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   ID id-HARQ-Preamble-Mode-Activation-Indicator
                                                         CRITICALITY ignore EXTENSION
                                                                                         HARQ-Preamble-Mode-Activation-Indicator
            PRESENCE
                        optional}|
    { ID id-MIMO-N-M-Ratio
                                                         CRITICALITY ignore EXTENSION
                                                                                         MIMO-N-M-Ratio
                PRESENCE optional |
     ID id-SixtyfourQAM-DL-UsageIndicator
                                                         CRITICALITY ignore EXTENSION SixtyfourQAM-DL-UsageIndicator
                                                                                                                                 PRESENCE optional } |
     ID id-HSDSCH-TBSizeTableIndicator
                                                         CRITICALITY ignore EXTENSION HSDSCH-TBSizeTableIndicator
                                                                                                                                 PRESENCE optional },
HS-DSCH-FDD-Secondary-Serving-Information ::= SEQUENCE {
    hsscch-PowerOffset
                                            HSSCCH-PowerOffset
                                                                                         OPTIONAL,
    measurement-Power-Offset
                                            Measurement-Power-Offset,
    sixtvfourOAM-UsageAllowedIndicator
                                            SixtvfourOAM-UsageAllowedIndicator
                                                                                         OPTIONAL,
    hSDSCH-RNTI
                                            HSDSCH-RNTI,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-ExtIEs } }
                                                                                                                                         OPTIONAL,
HS-DSCH-FDD-Secondary-Serving-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-DiversityMode
                                    CRITICALITY reject
                                                             EXTENSION DiversityMode PRESENCE optional }
    {ID id-TransmitDiversityIndicator
                                                CRITICALITY reject
                                                                         EXTENSION TransmitDiversityIndicator
                                                                                                                  PRESENCE optional },
    . . .
```

```
HS-DSCH-FDD-Secondary-Serving-Information-Response ::= SEQUENCE {
    hsSCCH-Specific-Information-ResponseFDD
                                                HSSCCH-Specific-InformationRespListFDD
                                                                                                          OPTIONAL,
    sixtyfourQAM-DL-UsageIndicator
                                                SixtyfourOAM-DL-UsageIndicator
                                                                                                          OPTIONAL,
    hSDSCH-TBSizeTableIndicator
                                                HSDSCH-TBSizeTableIndicator
                                                                                                          OPTIONAL,
                                    ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-Respons-ExtIEs } }
    iE-Extensions
    OPTIONAL,
HS-DSCH-FDD-Secondary-Serving-Information-Respons-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-Information-To-Modify ::= SEQUENCE
    hsscch-PowerOffset
                                                HSSCCH-PowerOffset
                                                                                                   OPTIONAL,
    measurement-Power-Offset
                                                Measurement-Power-Offset
                                                                                                   OPTIONAL,
    hSSCCH-CodeChangeGrant
                                                HSSCCH-Code-Change-Grant
                                                                                                   OPTIONAL,
                                                                                                   OPTIONAL,
    sixtyfourOAM-UsageAllowedIndicator
                                                SixtyfourQAM-UsageAllowedIndicator
    iE-Extensions
                                                ProtocolExtensionContainer { { HS-DSCH-Secondary-Serving-Information-To-Modify-ExtIEs } }
    OPTIONAL,
    . . .
HS-DSCH-Secondary-Serving-Information-To-Modify-ExtlEs NBAP-PROTOCOL-EXTENSION ::=
    {ID id-DiversityMode
                                CRITICALITY reject
                                                        EXTENSION DiversityMode PRESENCE optional } |
    {ID id-TransmitDiversityIndicator
                                                CRITICALITY reject
                                                                         EXTENSION TransmitDiversityIndicator
                                                                                                                  PRESENCE optional }
-- This IE shall be present if Diversity Mode IE is present and is not set to 'none'
    {ID id-NonCellSpecificTxDiversity
                                                CRITICALITY reject
                                                                                                                     PRESENCE optional },
                                                                         EXTENSION NonCellSpecificTxDiversity
    . . .
HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised ::= SEQUENCE {
    hsscch-PowerOffset
                                                HSSCCH-PowerOffset
                                                                                                   OPTIONAL,
                                                SixtyfourQAM-UsageAllowedIndicator
    sixtyfourQAM-UsageAllowedIndicator
                                                                                                   OPTIONAL,
    iE-Extensions
                            ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised-ExtIEs } }
        OPTIONAL,
HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-FDD-Secondary-Serving-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator
                                                HSSCCH-CodeChangeIndicator
                                                                                             OPTIONAL.
    hS-PDSCH-Code-Change-Indicator
                                                HS-PDSCH-Code-Change-Indicator
                                                                                             OPTIONAL,
    -- This IE shall never be included. If received it shall be ignored.
                                                ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Update-Information-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
```

```
HS-DSCH-FDD-Secondary-Serving-Update-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-Cell-Change-Information-Response ::= SEQUENCE
    hS-DSCH-Secondary-Serving-cell-choice
                                                HS-DSCH-Secondary-Serving-cell-change-choice,
                                                ProtocolExtensionContainer { { HS-DSCH-Secondary-Serving-Cell-Change-Information-Response-ExtIEs }
    iE-Extensions
       OPTIONAL,
HS-DSCH-Secondary-Serving-Cell-Change-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-cell-change-choice ::= CHOICE
    hS-Secondary-Serving-cell-change-successful
                                                        HS-Secondary-Serving-cell-change-successful,
    hS-Secondary-Serving-cell-change-unsuccessful
                                                        HS-Secondary-Serving-cell-change-unsuccessful,
HS-Secondary-Serving-cell-change-successful ::= SEQUENCE {
    hS-DSCH-FDD-Secondary-Serving-Information-Response
                                                            HS-DSCH-FDD-Secondary-Serving-Information-Response,
    iE-Extensions
                                        ProtocolExtensionContainer { { HS-Secondary-Serving-cell-change-successful-ExtIEs} } OPTIONAL,
HS-Secondary-Serving-cell-change-successful-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-Secondary-Serving-cell-change-unsuccessful ::= SEQUENCE {
    cause
                                    ProtocolExtensionContainer { { HS-Secondary-Serving-cell-change-unsuccessful-ExtIEs} } OPTIONAL,
    iE-Extensions
HS-Secondary-Serving-cell-change-unsuccessful-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-Remove ::= NULL
HSDSCH-Paging-System-InformationFDD ::= SEQUENCE
    paging-MACFlow-Specific-Information
                                                    Paging-MACFlow-Specific-Information,
    hSSCCH-Power
                                                    DL-Power,
    hSPDSCH-Power
                                                    DL-Power.
    number-of-PCCH-transmission
                                                    Number-of-PCCH-transmission,
    transport-Block-Size-List
                                                    Transport-Block-Size-List,
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-Paging-System-InformationFDD-ExtIEs } }
    OPTIONAL,
    . . .
```

```
HSDSCH-Paging-System-InformationFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Paging-System-Information-ResponseFDD ::= SEOUENCE (SIZE (1..maxNrOfPagingMACFlow)) OF HSDSCH-Paging-System-Information-ResponseList
HSDSCH-Paging-System-Information-ResponseList ::= SEQUENCE {
    pagingMACFlow-ID
                                                   Paging-MACFlow-ID,
   bindingID
                                                   BindingID
                                                                                              OPTIONAL,
    transportLayerAddress
                                                   TransportLayerAddress
                                                                                              OPTIONAL,
   hSPDSCH-Code-Index
                                                   HSPDSCH-Code-Index,
   iE-Extensions
                                                   ProtocolExtensionContainer { { HSDSCH-Paging-System-Information-ResponseList-ExtIEs } }
   OPTIONAL.
    . . .
HSDSCH-Paging-System-Information-ResponseList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-TDD-Information-Response ::= SEQUENCE {
   hsDSCH-MACdFlow-Specific-InformationResp
                                                   HSDSCH-MACdFlow-Specific-InformationResp
                                                                                              OPTIONAL,
   hsSCCH-Specific-Information-ResponseTDD
                                                   HSSCCH-Specific-InformationRespListTDD
                                                                                              OPTIONAL, -- Not Applicable to 1.28Mcps TDD or
7.68Mcps TDD
   hsSCCH-Specific-Information-ResponseTDDLCR
                                                   HSSCCH-Specific-InformationRespListTDDLCR OPTIONAL, -- Not Applicable to 3.84Mcps TDD or
7.68Mcps TDD, This HSSCCH Specific Information is for the first Frequency repetition, HSSCCH Specific Information for Frequency repetitions 2 and
on, should be defined in MultipleFreg-HSPDSCH-InformationList-ResponseTDDLCR
    hARO-MemoryPartitioning
                                                   HARO-MemoryPartitioning
                                                                                              OPTIONAL, -- This HARO Memory Partitioning
Information is for the first Frequency repetition, HARO Memory Partitioning Information for Frequency repetitions 2 and on, should be defined in
MultipleFreg-HSPDSCH-InformationList-ResponseTDDLCR
   iE-Extensions
                                                   OPTIONAL,
HSDSCH-TDD-Information-Response-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-hsSCCH-Specific-Information-ResponseTDD768
                                                                      CRITICALITY ignore EXTENSION HSSCCH-Specific-InformationRespListTDD768
    PRESENCE optional } |
{ ID id-UARFCNforNt
                                                                      CRITICALITY ignore EXTENSION UARFON
                                           PRESENCE optional |
    -- Applicable to 1.28Mcps TDD when using multiple frequencies , This is the UARFCN for the first Frequency repetition
{ ID id-multipleFreq-HSPDSCH-InformationList-ResponseTDDLCR
                                                                      CRITICALITY ignore EXTENSION MultipleFreq-HSPDSCH-InformationList-
ResponseTDDLCR PRESENCE optional }
    -- Applicable to 1.28Mcps TDD when using multiple frequencies ,This MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR is the HS-SCCH and HARQ
Memory Partitioning information for the 2nd and beyond HS-PDSCH frequencies.
{ ID id-multicarrier-number
                                                                      CRITICALITY ignore EXTENSION Multicarrier-Number
                                       PRESENCE optional } |
    -- Applicable for 1.28Mcps TDD when using multiple frequencies
    {ID id-MIMO-SFMode-For-HSPDSCHDualStream
                                                      CRITICALITY reject
                                                                              EXTENSION MIMO-SFMode-For-HSPDSCHDualStream
               PRESENCE optional |
    {ID id-MIMO-ReferenceSignal-InformationListLCR
                                                      CRITICALITY reject EXTENSION MIMO-ReferenceSignal-InformationListLCR
                                                                                                                                    PRESENCE
optional },
    . . .
```

```
HSDSCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InformationResp-Item
HSDSCH-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
    hsDSCHMacdFlow-Id
                                                     HSDSCH-MACdFlow-ID,
    bindingID
                                                     BindingID
                                                                                 OPTIONAL.
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                 OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation
                                                     HSDSCH-Initial-Capacity-Allocation OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs } }
    OPTIONAL,
    . . .
HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-MACdFlows-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-Info
                                                     HSDSCH-MACdFlow-Specific-InfoList,
    priorityOueue-Info
                                                     PriorityOueue-InfoList,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-MACdFlows-Information-ExtIEs } }
   OPTIONAL,
    . . .
HSDSCH-MACdFlows-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem
HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    hsDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
                                                                     OPTIONAL,
   bindingID
                                        BindingID
    transportLayerAddress
                                        TransportLayerAddress
                                                                     OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs} }
                                                                                                                          OPTIONAL,
HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlOos
                            CRITICALITY ignore
                                                     EXTENSION TnlOos
                                                                         PRESENCE optional },
    . . .
HSDSCH-MACdFlows-to-Delete ::= SEOUENCE (SIZE (1...maxNrOfMACdFlows)) OF HSDSCH-MACdFlows-to-Delete-Item
HSDSCH-MACdFlows-to-Delete-Item ::= SEOUENCE
    hsDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
   iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlows-to-Delete-Item-ExtIEs} }
                                                                                                                          OPTIONAL,
    . . .
HSDSCH-MACdFlows-to-Delete-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

1043

```
HSDSCH-TBSizeTableIndicator ::= ENUMERATED {
    octet-aligned
HSSCCH-PowerOffset ::= INTEGER (0..255)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
HSDSCH-Initial-Capacity-Allocation: = SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF HSDSCH-Initial-Capacity-AllocationItem
HSDSCH-Initial-Capacity-AllocationItem ::= SEQUENCE {
    schedulingPriorityIndicator
                                   SchedulingPriorityIndicator,
    maximum-MACdPDU-Size
                                   MACdPDU-Size,
    hSDSCH-InitialWindowSize
                                   HSDSCH-InitialWindowSize,
                                   ProtocolExtensionContainer { { HSDSCH-Initial-Capacity-AllocationItem-ExtIEs } } OPTIONAL,
    iE-Extensions
HSDSCH-Initial-Capacity-AllocationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MaximumMACdPDU-SizeExtended
                                           CRITICALITY ignore
                                                                               MAC-PDU-SizeExtended
                                                                                                         PRESENCE optional },
                                                                   EXTENSION
HSDSCH-InitialWindowSize
                                    ::= INTEGER (1..255)
-- Number of MAC-d PDUs.
HSDSCH-PreconfigurationInfo ::= SEQUENCE {
    setsOfHS-SCCH-Codes
                         SetsOfHS-SCCH-Codes,
    hARO-MemoryPartitioning
                               HARQ-MemoryPartitioning,
    e-DCH-FDD-DL-Control-Channel-Information
                                                    E-DCH-FDD-DL-Control-Channel-Information
                                                                                                 OPTIONAL,
    hARQ-Preamble-Mode-Activation-Indicator
                                               HARQ-Preamble-Mode-Activation-Indicator
                                                                                           OPTIONAL,
    mIMO-N-M-Ratio
                    MIMO-N-M-Ratio
                                               OPTIONAL,
    continuousPacketConnectivityHS-SCCH-less-Information-Response ContinuousPacketConnectivityHS-SCCH-less-Information-Response
    OPTIONAL,
                                       ProtocolExtensionContainer { { HSDSCH-PreconfigurationInfo-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
HSDSCH-PreconfigurationInfo-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-PreconfigurationSetup ::= SEQUENCE
    mAChsResetScheme
                           MAChsResetScheme,
    hSDSCH-Physical-Layer-Category
                                        INTEGER (1..64,...),
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                               MAChsReorderingBufferSize-for-RLC-UM,
    secondaryServingCells
                               SecondaryServingCells
                                                               OPTIONAL,
    numPrimaryHS-SCCH-Codes
                               NumHS-SCCH-Codes
                                                           OPTIONAL,
    hARQ-Preamble-Mode
                           HARO-Preamble-Mode
                                                                   OPTIONAL,
    mIMO-ActivationIndicator
                                   MIMO-ActivationIndicator
                                                                        OPTIONAL,
```

```
hSDSCH-MACdPDUSizeFormat
                                    HSDSCH-MACdPDUSizeFormat
                                                                        OPTIONAL,
    sixtyfourOAM-UsageAllowedIndicator
                                            SixtyfourQAM-UsageAllowedIndicator
                                                                                        OPTIONAL,
    uE-with-enhanced-HS-SCCH-support-indicator
                                                    NULL
                                                                OPTIONAL.
    continuousPacketConnectivityHS-SCCH-less-Information
                                                                    ContinuousPacketConnectivityHS-SCCH-less-Information
                                                                                                                                        OPTIONAL.
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCHPreconfigurationSetup-ExtIEs } }
                                                                                                                                OPTIONAL.
HSDSCHPreconfigurationSetup-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-UE-SupportIndicatorExtension
                                                                                                                   PRESENCE optional },
                                                CRITICALITY ignore
                                                                        EXTENSION UE-SupportIndicatorExtension
HS-SCCH-PreconfiguredCodes
                                        ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HS-SCCH-PreconfiguredCodesItem
HS-SCCH-PreconfiguredCodesItem ::= SEQUENCE
    hS-SCCH-CodeNumber
                                HS-SCCH-CodeNumber,
                            ProtocolExtensionContainer { { HS-SCCH-PreconfiguredCodesItem-ExtIEs} } OPTIONAL,
   iE-Extensions
HS-SCCH-PreconfiguredCodesItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-CodeNumber ::= INTEGER (0..127)
HSSCCH-Specific-InformationRespListFDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Codes
HSSCCH-Codes ::= SEQUENCE {
    codeNumber
                                                    INTEGER (0..127),
                                                    ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemFDD-ExtIEs } }
   iE-Extensions
   OPTIONAL,
    . . .
HSSCCH-Specific-InformationRespItemFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSCCH-Specific-InformationRespListTDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDD
HSSCCH-Specific-InformationRespItemTDD ::= SEOUENCE
    timeslot
                                                    TimeSlot,
                                                    MidambleShiftAndBurstType,
    midambleShiftAndBurstType
    tDD-ChannelisationCode
                                                    TDD-ChannelisationCode,
    hSSICH-Info
                                                    HSSICH-Info,
                                                    ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDD-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
```

1045

```
HSSCCH-Specific-InformationRespItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSCCH-Specific-InformationRespListTDDLCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDDLCR
HSSCCH-Specific-InformationRespItemTDDLCR ::= SEQUENCE {
    timeslotLCR
                                                TimeSlotLCR,
    midambleShiftLCR
                                                MidambleShiftLCR,
    first-TDD-ChannelisationCode
                                                    TDD-ChannelisationCode,
    second-TDD-ChannelisationCode
                                            TDD-ChannelisationCode,
    hSSICH-InfoLCR
                                                HSSICH-InfoLCR,
   iE-Extensions
                                                ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDDLCR-ExtIEs } }
   OPTIONAL,
    . . .
HSSCCH-Specific-InformationRespItemTDDLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
                            CRITICALITY reject
    {ID id-UARFCNforNt
                                                    EXTENSION UARFCN
                                                                             PRESENCE optional },
    -- Applicable for 1.28Mcps TDD when using multiple frequencies. this IE indicates the frequency which is actually used by the HS-SCCH
HSSCCH-Specific-InformationRespListTDD768 ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDD768
HSSCCH-Specific-InformationRespItemTDD768 ::= SEQUENCE {
    timeslot
                                                    TimeSlot,
    midambleShiftAndBurstType768
                                                    MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                    TDD-ChannelisationCode768,
    hSSICH-Info768
                                                    HSSICH-Info768,
                                                    ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDD768-ExtIEs } }
    iE-Extensions
       OPTIONAL,
    . . .
HSSCCH-Specific-InformationRespItemTDD768-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSICH-Info ::= SEQUENCE {
    hsSICH-ID
                                                    HS-SICH-ID,
    timeslot
                                                    TimeSlot,
   midambleShiftAndBurstType
                                                    MidambleShiftAndBurstType,
    tDD-ChannelisationCode
                                                    TDD-ChannelisationCode,
                                                     ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } }
   iE-Extensions
                                                                                                                                 OPTIONAL,
HSSICH-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSICH-InfoLCR ::= SEQUENCE {
   hsSICH-ID
                                                    HS-SICH-ID,
```

```
timeslotLCR
                                                    TimeSlotLCR,
    midambleShiftLCR
                                                    MidambleShiftLCR.
    tDD-ChannelisationCode
                                                TDD-ChannelisationCode.
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } }
                                                                                                                                 OPTIONAL,
HSSICH-Info-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-HS-SICH-ID
                                                         CRITICALITY ignore EXTENSION Extended-HS-SICH-ID
                                                                                                                  PRESENCE optional },
    -- used if the HS-SICH identity has a value larger than 31
HSSICH-Info768 ::= SEQUENCE {
    hsSICH-ID
                                                    HS-SICH-ID,
    timeslot
                                                    TimeSlot,
    midambleShiftAndBurstType768
                                                    MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                    TDD-ChannelisationCode768,
                                                     ProtocolExtensionContainer { { HSSICH-Info-768-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
HSSICH-Info-768-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Reception-Quality-Value ::= SEQUENCE
                                HS-SICH-failed,
    failed-HS-SICH
    missed-HS-SICH
                                HS-SICH-missed,
    total-HS-SICH
                                HS-SICH-total,
                                ProtocolExtensionContainer { { HS-SICH-Reception-Quality-Value-ExtIEs} } OPTIONAL,
    iE-Extensions
HS-SICH-Reception-Quality-Value-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Additional-failed-HS-SICH
                                            CRITICALITY reject
                                                                     EXTENSION HS-SICH-failed
                                                                                                          PRESENCE
                                                                                                                         optional
                                                                                                                                         } |
    -- Mandatory for 1.28Mcps TDD only, used when there are more than 20 failed HS-SICH
    {ID id-Additional-missed-HS-SICH
                                            CRITICALITY reject
                                                                                                                         optional } |
                                                                     EXTENSION HS-SICH-missed
                                                                                                          PRESENCE
    -- Mandatory for 1.28Mcps TDD only, used when there are more than 20 missed HS-SICH
    {ID id-Additional-total-HS-SICH
                                            CRITICALITY reject
                                                                                                                         optional },
                                                                     EXTENSION HS-SICH-total
                                                                                                          PRESENCE
    -- Mandatory for 1.28Mcps TDD only, used when there are more than 20 total HS-SICH
HS-SICH-failed ::= INTEGER (0..20)
HS-SICH-missed ::= INTEGER (0..20)
HS-SICH-total ::= INTEGER (0..20)
HS-SICH-Reception-Quality-Measurement-Value ::= INTEGER (0..20)
-- According to mapping in [23]
```

```
HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)
HSDSCH-RNTI ::= INTEGER (0..65535)
HS-PDSCH-FDD-Code-Information ::= SEQUENCE {
    number-of-HS-PDSCH-codes
                                                    INTEGER (0..maxHS-PDSCHCodeNrComp-1),
    hS-PDSCH-Start-code-number
                                                HS-PDSCH-Start-code-number
                                                                                 OPTIONAL,
-- Only included when number of HS-DSCH codes > 0
    iE-Extensions
                                ProtocolExtensionContainer { { HS-PDSCH-FDD-Code-Information-ExtIEs} } OPTIONAL,
    . . .
HS-PDSCH-FDD-Code-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-PDSCH-Start-code-number ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)
HS-SCCH-ID ::= INTEGER (0..31)
HS-SICH-ID ::= INTEGER (0..31)
HS-SCCH-FDD-Code-Information::= CHOICE {
                           HS-SCCH-FDD-Code-List,
    replace
    remove
                           NULL,
HS-SCCH-FDD-Code-List ::= SEOUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-FDD-Code-Information-Item
HS-SCCH-FDD-Code-Information-Item ::= INTEGER (0..maxHS-SCCHCodeNrComp-1)
HSSCCH-CodeChangeIndicator ::= ENUMERATED {
    hsSCCHCodeChangeNeeded
HSSCCH-Code-Change-Grant
                           ::= ENUMERATED {
    changeGranted
HS-PDSCH-Code-Change-Indicator ::= ENUMERATED {
    hsPDSCHCodeChangeNeeded
HS-PDSCH-Code-Change-Grant ::= ENUMERATED {
    changeGranted
HSDSCH-Configured-Indicator::= ENUMERATED {
    configured-HS-DSCH,
    no-configured-HS-DSCH
HS-DSCH-Serving-Cell-Change-Info ::= SEQUENCE {
    hspdsch-RL-ID
```

```
hSDSCH-FDD-Information
                                 HSDSCH-FDD-Information OPTIONAL,
   hsdsch-RNTI
                                 HSDSCH-RNTI.
   iE-Extensions
                                 ProtocolExtensionContainer { { HS-DSCH-Serving-Cell-Change-Info-ExtIEs} } 
                                                                                                           OPTIONAL.
HS-DSCH-Serving-Cell-Change-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-ContinuousPacketConnectivityHS-SCCH-less-Information
                                                               CRITICALITY reject EXTENSION ContinuousPacketConnectivityHS-SCCH-less-
Information
              PRESENCE optional } |
   { ID id-ContinuousPacketConnectivityDTX-DRX-Information
                                                               CRITICALITY reject EXTENSION ContinuousPacketConnectivityDTX-DRX-Information
       PRESENCE optional },
   . . .
HS-DSCH-Serving-Cell-Change-Info-Response::= SEQUENCE
   hS-DSCH-serving-cell-choice
                                 HS-DSCH-serving-cell-choice,
   iE-Extensions
                                 ProtocolExtensionContainer { { HS-DSCH-serving-cell-informationResponse-ExtIEs} } OPTIONAL,
HS-DSCH-serving-cell-informationResponse-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-serving-cell-choice ::= CHOICE {
   hS-serving-cell-change-successful
                                        HS-serving-cell-change-successful,
   hS-serving-cell-change-unsuccessful
                                        HS-serving-cell-change-unsuccessful,
HS-serving-cell-change-successful ::= SEQUENCE
   hSDSCH-FDD-Information-Response
                                     HSDSCH-FDD-Information-Response,
                                     ProtocolExtensionContainer { { HS-serving-cell-change-successful-ExtIEs} } OPTIONAL,
   iE-Extensions
HS-serving-cell-change-successful-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional },
less-Information-Response
HS-serving-cell-change-unsuccessful ::= SEQUENCE
   cause
                                 ProtocolExtensionContainer { { HS-serving-cell-change-unsuccessful-ExtIEs} } OPTIONAL,
   iE-Extensions
HS-serving-cell-change-unsuccessful-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

1049

```
HS-DSCH-DRX-Cycle-FACH ::= ENUMERATED {v4, v8, v16, v32, ...}
HS-DSCH-RX-Burst-FACH: = ENUMERATED {v1,v2,v4,v8,v16,...}
HSDSCH-FDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator
                                                     HSSCCH-CodeChangeIndicator
                                                                                                  OPTIONAL,
    cgiFeedback-CycleK
                                                     CQI-Feedback-Cycle
                                                                                                  OPTIONAL,
    cqiRepetitionFactor
                                                     CQI-RepetitionFactor
                                                                                                  OPTIONAL,
    ackNackRepetitionFactor
                                                     AckNack-RepetitionFactor
                                                                                                  OPTIONAL,
    cqiPowerOffset
                                                     COI-Power-Offset
                                                                                                  OPTIONAL,
                                                     Ack-Power-Offset
    ackPowerOffset
                                                                                                  OPTIONAL,
    nackPowerOffset
                                                     Nack-Power-Offset
                                                                                                  OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-FDD-Update-Information-ExtIEs } }
                                                                                                                                          OPTIONAL,
HSDSCH-FDD-Update-Information-ExtIES NBAP-PROTOCOL-EXTENSION ::=
    {ID id-HS-PDSCH-Code-Change-Indicator
                                                 CRITICALITY ignore
                                                                         EXTENSION
                                                                                     HS-PDSCH-Code-Change-Indicator PRESENCE optional },
    . . .
HSDSCH-TDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator
                                                     HSSCCH-CodeChangeIndicator
                                                                                                  OPTIONAL,
    tDDAckNackPowerOffset
                                                     TDD-AckNack-Power-Offset
                                                                                                  OPTIONAL,
                                                     ProtocolExtensionContainer { { HSDSCH-TDD-Update-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
HSDSCH-TDD-Update-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HSPDSCH-Code-Index ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)
-- index of first HS-PDSCH code
HSPDSCH-First-Code-Index ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)
    -- index of first HS-PDSCH code
HSPDSCH-Second-Code-Index ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)
    -- index of second HS-PDSCH code
HSPDSCH-Second-Code-Support ::= BOOLEAN
    -- true: applied, false: not applied
HSDPA-Associated-PICH-InformationLCR ::= CHOICE {
    hsdpa-PICH-Shared-with-PCH
                                                     HSDPA-PICH-Shared-with-PCH.
    hsdpa-PICH-notShared-with-PCHLCR
                                                     HSDPA-PICH-notShared-with-PCHLCR,
HSDPA-PICH-notShared-with-PCHLCR ::= SEQUENCE {
    hSDPA-PICH-notShared-ID
                                             CommonPhysicalChannelID,
```

```
tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    timeSlotLCR
                                            TimeSlotLCR.
    midambleShiftLCR
                                            MidambleShiftLCR.
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
                                            PagingIndicatorLength,
    pagingIndicatorLength
    pICH-Power
                                            PICH-Power,
    second-TDD-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
                                            STTD-Indicator,
    sttd-Indicator
    iE-Extensions
                                            ProtocolExtensionContainer { { HSDPA-PICH-notShared-with-PCHLCR-ExtIEs } }
                                                                                                                                 OPTIONAL,
    . . .
HSDPA-PICH-notShared-with-PCHLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Common-System-InformationLCR ::= SEQUENCE {
    hsdsch-Common-InformationLCR
                                                    HSDSCH-Common-InformationLCR
                                                                                                                                 OPTIONAL,
    commonMACFlow-Specific-InformationLCR
                                                    CommonMACFlow-Specific-InfoListLCR
                                                                                                                                 OPTIONAL,
    common-H-RNTI-InformationLCR
                                                    Common-H-RNTI-InformationLCR
                                                                                                                                 OPTIONAL,
    svnc-InformationLCR
                                                    Svnc-InformationLCR
                                                                                                                                 OPTIONAL,
                                                    TDD-AckNack-Power-Offset
    tDD-AckNack-Power-Offset
                                                                                                                                 OPTIONAL,
    hSSICH-SIRTarget
                                                    UL-SIR
                                                                                                                                 OPTIONAL,
                                                    TDD-TPC-UplinkStepSize-LCR
    hSSICH-TPC-StepSize
                                                                                                                                 OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-Common-System-InformationLCR-ExtIEs } }
    OPTIONAL,
HSDSCH-Common-System-InformationLCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Common-System-Information-ResponseLCR ::= SEQUENCE {
    hsSCCH-Specific-Information-ResponseLCR
                                                    HSSCCH-Specific-InformationRespListLCR
                                                                                                                         OPTIONAL,
    hARO-MemoryPartitioning
                                                    HARO-MemoryPartitioning
                                                                                                                         OPTIONAL,
-- This HARO Memory Partitioning Information is for the first Frequency repetition.
    commonMACFlow-Specific-Info-ResponseLCR
                                                    CommonMACFlow-Specific-InfoList-ResponseLCR
                                                                                                                         OPTIONAL,
                                                    ProtocolExtensionContainer { { HSDSCH-Common-System-Information-ResponseLCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
HSDSCH-Common-System-Information-ResponseLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
{ ID id-UARFCNforNt
                                                        CRITICALITY ignore EXTENSION UARFCN
                                                                                                 PRESENCE optional |
-- Applicable to 1.28Mcps TDD when using multiple frequencies. This is the UARFCN for the first Frequency repetition
{ ID id-MultipleFreg-HARO-MemoryPartitioning-InformationList
                                                               CRITICALITY ignore EXTENSION MultipleFreg-HARO-MemoryPartitioning-InformationList
    PRESENCE optional }
-- Applicable to 1.28Mcps TDD when using multiple frequencies. This HARQ MemoryPartitioning Information is for the 2nd and beyond frequencies.
{ ID id-CommonMACFlow-Specific-InfoList-ResponseLCR-Ext CRITICALITY ignore EXTENSION CommonMACFlow-Specific-InfoList-ResponseLCR-Ext PRESENCE
optional },
```

```
MultipleFreg-HARO-MemoryPartitioning-InformationList ::= SEOUENCE (SIZE (1..maxFrequencyinCell-1)) OF MultipleFreg-HARO-MemoryPartitioning-
InformationItem
--Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreq-HARQ-MemoryPartitioning-InformationItem ::= SEQUENCE {
    hARQ-MemoryPartitioning
                                                HARQ-MemoryPartitioning,
    uARFCN
                                                 UARFCN,
    iE-Extensions
                                    ProtocolExtensionContainer { { MultipleFreg-HARO-MemoryPartitioning-InformationItem-ExtIEs} }
           OPTIONAL,
MultipleFreq-HARQ-MemoryPartitioning-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Common-InformationLCR ::= SEQUENCE {
    cCCH-PriorityOueue-Id
                                                                     PriorityOueue-Id,
    sRB1-PriorityQueue-Id
                                                                     PriorityOueue-Id,
    associatedCommon-MACFlowLCR
                                                                     Common-MACFlow-ID-LCR,
    fACH-Measurement-Occasion-Cycle-Length-Coefficient
                                                                     FACH-Measurement-Occasion-Cycle-Length-Coefficient
    OPTIONAL,
    bCCH-Specific-HSDSCH-RNTI-InformationLCR
                                                                     BCCH-Specific-HSDSCH-RNTI-InformationLCR
    OPTIONAL,
                                        ProtocolExtensionContainer { { HSDSCH-Common-InformationLCR-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
HSDSCH-Common-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Paging-System-InformationLCR ::= SEQUENCE {
    paging-MACFlow-Specific-InformationLCR
                                                     Paging-MACFlow-Specific-InformationLCR,
                                                     DL-Power
    hSSCCH-Power
        OPTIONAL,
    hSPDSCH-Power
                                                     DL-Power
       OPTIONAL,
    reception-Window-Size
                                                     INTEGER (1..16)
        OPTIONAL,
    n-PCH
                                                     INTEGER (1..8)
        OPTIONAL,
    paging-Subchannel-Size
                                                     INTEGER (1..3)
       OPTIONAL,
    transport-Block-Size-List
                                                     Transport-Block-Size-List
       OPTIONAL,
```

```
ProtocolExtensionContainer { { HSDSCH-Paging-System-InformationLCR-ExtIEs } }
    iE-Extensions
   OPTIONAL,
HSDSCH-Paging-System-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Paqing-System-Information-ResponseLCR ::= SEQUENCE (SIZE (1..maxNrOfPaqingMACFlow)) OF HSDSCH-Paqing-System-Information-ResponseListLCR
HSDSCH-Paging-System-Information-ResponseListLCR ::= SEQUENCE
    pagingMACFlow-ID
                                                     Paging-MACFlow-ID,
    bindingID
                                                    BindingID
                                                                                                 OPTIONAL,
                                                    TransportLayerAddress
    transportLayerAddress
                                                                                                 OPTIONAL,
    dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst
                                                                DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst,
                                                     ProtocolExtensionContainer { { HSDSCH-Paging-System-Information-ResponseListLCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HSDSCH-Paging-System-Information-ResponseListLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-ID-LCR ::= INTEGER (0..255)
HSSCCH-Specific-InformationRespListLCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHsLCR)) OF HSSCCH-Specific-InformationRespItemLCR
HSSCCH-Specific-InformationRespItemLCR ::= SEQUENCE {
    hs-scch-id-Lcr
                                                    HS-SCCH-ID-LCR,
                                                    ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemLCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HSSCCH-Specific-InformationRespItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Semi-PersistentScheduling-Information-LCR ::= SEQUENCE
    transport-Block-Size-List
                                            Transport-Block-Size-List-LCR,
    repetition-Period-List-LCR
                                            Repetition-Period-List-LCR,
                                            SPS-Reservation-Indicator
    hS-DSCH-SPS-Reservation-Indicator
                                                                                     OPTIONAL,
    hS-DSCH-SPS-Operation-Indicator
                                            HS-DSCH-SPS-Operation-Indicator,
                                            ProtocolExtensionContainer { { HS-DSCH-Semi-PersistentScheduling-Information-LCR-ExtIEs } }
    iE-Extensions
       OPTIONAL,
    . . .
HS-DSCH-Semi-PersistentScheduling-Information-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Transport-Block-Size-List-LCR ::= SEQUENCE (SIZE (1..maxNoOfTBSs-Mapping-HS-DSCH-SPS)) OF Transport-Block-Size-Item-LCR
```

```
Transport-Block-Size-Item-LCR ::= SEQUENCE {
    transport-Block-Size-maping-Index-LCR
                                                Transport-Block-Size-maping-Index-LCR,
    transport-Block-Size-Index-LCR
                                                Transport-Block-Size-Index-LCR,
    iE-Extensions
                                                ProtocolExtensionContainer { { Transport-Block-Size-Item-LCR-ExtIEs } }
                                                                                                                                         OPTIONAL.
Transport-Block-Size-Item-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
Transport-Block-Size-maping-Index-LCR ::= INTEGER (0..maxNoOfTBSs-Mapping-HS-DSCH-SPS-1)
Transport-Block-Size-Index-LCR ::= INTEGER (1..maxNoOfHS-DSCH-TBSsLCR)
Repetition-Period-List-LCR ::= SEQUENCE (SIZE (1..maxNoOfRepetition-Period-LCR)) OF Repetition-Period-Item-LCR
Repetition-Period-Item-LCR ::= SEQUENCE {
    repetitionPeriodIndex
                                RepetitionPeriodIndex,
    repetitionPeriod
                                RepetitionPeriod,
                                RepetitionLength
                                                                 OPTIONAL,
    repetitionLength
    iE-Extensions
                                ProtocolExtensionContainer { Repetition-Period-Item-LCR-ExtIEs } }
                                                                                                                          OPTIONAL,
    . . .
Repetition-Period-Item-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RepetitionPeriodIndex ::= INTEGER (0..maxNoOfRepetitionPeriod-SPS-LCR-1)
SPS-Reservation-Indicator ::= ENUMERATED {
    reserve
HS-DSCH-SPS-Operation-Indicator ::= CHOICE {
    logicalChannellevel
                                LogicalChannellevel,
    priorityQueuelevel
                                PriorityQueuelevel,
    . . .
LogicalChannellevel ::= BIT STRING (SIZE (16))
PriorityQueuelevel ::= BIT STRING (SIZE (8))
HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR ::= SEQUENCE {
    transport-Block-Size-List
                                            Transport-Block-Size-List-LCR
                                                                                     OPTIONAL,
    repetition-Period-List-LCR
                                            Repetition-Period-List-LCR
                                                                                     OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs } }
                            OPTIONAL,
    . . .
```

```
HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
 ID id-HS-DSCH-SPS-Reservation-Indicator
                                                CRITICALITY ignore EXTENSION SPS-Reservation-Indicator
                                                                                                                     PRESENCE optional }
 ID id-HS-DSCH-SPS-Operation-Indicator
                                                CRITICALITY reject EXTENSION HS-DSCH-SPS-Operation-Indicator
                                                                                                                     PRESENCE optional },
HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR ::= SEQUENCE {
    hS-SICH-InformationList-for-HS-DSCH-SPS
                                                HS-SICH-InformationList-for-HS-DSCH-SPS.
    initial-HS-PDSCH-SPS-Resource
                                                Initial-HS-PDSCH-SPS-Resource
                                                                                        OPTIONAL,
    buffer-Size-for-HS-DSCH-SPS
                                                Process-Memory-Size
                                                                                        OPTIONAL,
    number-of-Processes-for-HS-DSCH-SPS
                                                Number-of-Processes-for-HS-DSCH-SPS
                                                                                        OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs } }
           OPTIONAL,
HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-InformationList-for-HS-DSCH-SPS ::= SEQUENCE (SIZE (1..maxNoOf-HS-SICH-SPS)) OF HS-SICH-InformationItem-for-HS-DSCH-SPS
HS-SICH-InformationItem-for-HS-DSCH-SPS ::= SEQUENCE {
    hS-SICH-Mapping-Index
                                    HS-SICH-Mapping-Index
                                                                    OPTIONAL,
    -- the IE is madatory for 1.28Mcps TDD.
    hS-SICH-Type
                                    HS-SICH-Type,
                                    ProtocolExtensionContainer { { HS-SICH-InformationItem-for-HS-DSCH-SPS-ExtIEs } }
    iE-Extensions
                                                                                                                                        OPTIONAL,
HS-SICH-InformationItem-for-HS-DSCH-SPS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Mapping-Index ::= INTEGER (0..maxNoOf-HS-SICH-SPS-1)
HS-SICH-Type ::= CHOICE {
    hS-SCCH-Associated-HS-SICH
                                        HS-SCCH-Associated-HS-SICH,
    non-HS-SCCH-Associated-HS-SICH
                                        Non-HS-SCCH-Associated-HS-SICH,
HS-SCCH-Associated-HS-SICH ::= SEQUENCE {
    hsSICH-ID
                                        HS-SICH-ID.
    extended-HS-SICH-ID
                                        Extended-HS-SICH-ID
                                                                    OPTIONAL,
Non-HS-SCCH-Associated-HS-SICH::= SEQUENCE {
    non-HS-SCCH-Aassociated-HS-SICH-ID Non-HS-SCCH-Aassociated-HS-SICH-ID,
```

```
Non-HS-SCCH-Aassociated-HS-SICH-ID ::= INTEGER (0..255)
Initial-HS-PDSCH-SPS-Resource::= SEQUENCE {
    repetitionPeriodIndex
                                                RepetitionPeriodIndex,
    repetitionLength
                                                RepetitionLength
                                                                            OPTIONAL,
    -- the IE is not used.
    hS-PDSCH-Offset
                                                TDD-PhysicalChannelOffset,
    timeslot-Resource-Related-Information
                                                HS-DSCH-TimeslotResourceLCR,
                                                TDD-ChannelisationCode,
    startCode
                                                TDD-ChannelisationCode,
    endCode
    transport-Block-Size-Index
                                                Transport-Block-Size-Index-LCR,
    modulationType
                                                ModulationSPS-LCR,
    hS-SICH-Mapping-Index
                                                HS-SICH-Mapping-Index,
    iE-Extensions
                                                ProtocolExtensionContainer { { Initial-HS-PDSCH-SPS-Resource-ExtIEs } }
                                                                                                                                        OPTIONAL
Initial-HS-PDSCH-SPS-Resource-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MidambleShiftLCR
                               CRITICALITY reject EXTENSION MidambleShiftLCR
                                                                                     PRESENCE
                                                                                                 optional },
    -- mandaroty for 1.28Mcps TDD.
HS-DSCH-TimeslotResourceLCR ::= BIT STRING (SIZE (5))
ModulationSPS-LCR ::= ENUMERATED {
    aPSK,
    sixteenOAM,
Number-of-Processes-for-HS-DSCH-SPS ::= INTEGER (1..16)
Add-To-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst::= SEOUENCE {
   non-HS-SCCH-Associated-HS-SICH-InformationList
                                                        Non-HS-SCCH-Associated-HS-SICH-InformationList,
    iE-Extensions
                                                        ProtocolExtensionContainer { Add-To-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-
PSCH-ReconfRqst-ExtIEs } }
                                    OPTIONAL,
Add-To-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Add-To-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst-Ext CRITICALITY reject
                                                                                                                 EXTENSION Non-HS-SCCH-Associated-
HS-SICH-InformationList-Ext
                                PRESENCE
                                            optional },
    . . .
Non-HS-SCCH-Associated-HS-SICH-InformationList ::= SEQUENCE (SIZE (0..maxNoOfNon-HS-SCCH-Assosiated-HS-SICH)) OF Non-HS-SCCH-Associated-HS-SICH-
InformationItem
Non-HS-SCCH-Associated-HS-SICH-InformationList-Ext ::= SEQUENCE (SIZE (0..maxNoOfNon-HS-SCCH-Assosiated-HS-SICH-Ext)) OF Non-HS-SCCH-Associated-HS-
SICH-InformationItem
Non-HS-SCCH-Associated-HS-SICH-InformationItem ::= SEQUENCE {
```

```
non-HS-SCCH-Aassociated-HS-SICH-ID
                                            Non-HS-SCCH-Aassociated-HS-SICH-ID,
    timeSlotLCR
                                            TimeSlotLCR.
    midambleShiftLCR
                                            MidambleShiftLCR.
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
    uARFCN
                                            UARFCN
                                                                         OPTIONAL.
                                            ProtocolExtensionContainer { { Non-HS-SCCH-Associated-HS-SICH-InformationItem-ExtIEs } }
    iE-Extensions
   OPTIONAL,
    . . .
Non-HS-SCCH-Associated-HS-SICH-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Modify-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst::= SEOUENCE {
    modify-non-HS-SCCH-Associated-HS-SICH-InformationList
                                                                Modify-Non-HS-SCCH-Associated-HS-SICH-InformationList,
                                        ProtocolExtensionContainer { { Modify-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst-
    iE-Extensions
ExtIEs } }
                    OPTIONAL,
Modify-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Modify-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst-Ext CRITICALITY reject
                                                                                                                  EXTENSION Modify-Non-HS-SCCH-
Associated-HS-SICH-InformationList-Ext
                                            PRESENCE
                                                        optional }.
Modify-Non-HS-SCCH-Associated-HS-SICH-InformationList ::= SEOUENCE (SIZE (0..maxNoOfNon-HS-SCCH-Assosiated-HS-SICH)) OF Modify-Non-HS-SCCH-
Associated-HS-SICH-InformationItem
Modify-Non-HS-SCCH-Associated-HS-SICH-InformationList-Ext ::= SEQUENCE (SIZE (0.. maxNoOfNon-HS-SCCH-Assosiated-HS-SICH-Ext)) OF Modify-Non-HS-
SCCH-Associated-HS-SICH-InformationItem
Modify-Non-HS-SCCH-Associated-HS-SICH-InformationItem ::= SEQUENCE {
    non-HS-SCCH-Aassociated-HS-SICH-ID
                                            Non-HS-SCCH-Aassociated-HS-SICH-ID.
    timeSlotLCR
                                            TimeSlotLCR
                                                                             OPTIONAL,
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                             OPTIONAL,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode
                                                                             OPTIONAL,
    uARFCN
                                            UARFCN
                                                                             OPTIONAL,
                                            ProtocolExtensionContainer { { Modify-Non-HS-SCCH-Associated-HS-SICH-InformationItem-ExtIEs } }
    iE-Extensions
       OPTIONAL.
    . . .
Modify-Non-HS-SCCH-Associated-HS-SICH-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (0..maxNoOfNon-HS-SCCH-Assosiated-HS-SICH)) OF
Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgstItem
```

```
Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRqst-Ext ::= SEQUENCE (SIZE (0..maxNoOfNon-HS-SCCH-Associated-HS-SICH-Ext))
OF Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgstItem
Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgstItem ::= SEQUENCE {
non-HS-SCCH-Aassociated-HS-SICH-ID
                                       Non-HS-SCCH-Aassociated-HS-SICH-ID.
MIMO-ReferenceSignal-InformationListLCR ::= SEOUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSICH-ReferenceSignal-InformationLCR
HSSICH-ReferenceSignal-InformationLCR ::= SEQUENCE {
   midambleConfigurationLCR
                                MidambleConfigurationLCR,
   midambleShift
                                INTEGER (0..15),
   timeSlotLCR
                                TimeSlotLCR,
                                iE-Extensions
                                                                                                                     OPTIONAL,
HSSICH-ReferenceSignal-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSICH-ReferenceSignal-InformationModifyLCR ::= SEQUENCE {
   hSSICH-ReferenceSignal-InformationLCR
                                           HSSICH-ReferenceSignal-InformationLCR OPTIONAL,
   iE-Extensions
                                 ProtocolExtensionContainer { { HSSICH-ReferenceSignal-InformationModifyLCR-ExtIEs } }
                                                                                                                            OPTIONAL,
   . . .
HSSICH-ReferenceSignal-InformationModifyLCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
  _____
-- -----
IB-OC-ID ::= INTEGER (1..16)
IB-SG-DATA ::= BIT STRING
-- Contains SIB data fixed" or "SIB data variable" in segment as encoded in ref.[18].
IB-SG-POS ::= INTEGER (0..4094)
-- Only even positions allowed
IB-SG-REP ::= ENUMERATED {rep4, rep8, rep16, rep32, rep64, rep128, rep256, rep512, rep1024, rep2048, rep4096}
IB-Type ::= ENUMERATED {
   mIB,
   sB1.
   sB2,
   sIB1,
   sIB2,
   sIB3.
   sIB4,
```

```
sIB5,
    sIB6,
    sIB7.
    not-Used-sIB8,
    not-Used-sIB9,
    not-Used-sIB10,
    sIB11,
    sIB12,
    sIB13,
    sIB13dot1,
    sIB13dot2,
    sIB13dot3,
    sIB13dot4,
    sIB14,
    sIB15,
    sIB15dot1,
    sIB15dot2,
    sIB15dot3,
    sIB16,
    . . . ,
    sIB17,
    sIB15dot4,
    sIB18,
    sIB15dot5,
    sIB5bis,
    sIB11bis,
    sIB15bis,
    sIB15dot1bis,
    sIB15dot2bis,
    sIB15dot3bis,
    sIB15dot6,
    sIB15dot7,
    sIB15dot8,
    sIB15dot2ter,
    sIB19
IMB-Parameters ::= SEQUENCE {
    sub-Frame-Number
                                             Sub-Frame-Number,
    fdd-dl-ChannelisationCodeNumber
                                             FDD-DL-ChannelisationCodeNumber
                                                                                                                         OPTIONAL,
    ie-Extensions
                                              ProtocolExtensionContainer { { IMB-Parameters-ExtIEs} }
                                                                                                                         OPTIONAL,
    . . .
IMB-Parameters-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Inactivity-Threshold-for-UE-DRX-Cycle ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512}
-- Unit subframe
```

```
Inactivity-Threshold-for-UE-DTX-Cycle2 ::= ENUMERATED {v1, v4, v8, v16, v32, v64, v128, v256}
-- Unit E-DCH TTI
Inactivity-Threshold-for-UE-Grant-Monitoring ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256}
-- Unit E-DCH TTI
InformationReportCharacteristics ::= CHOICE {
    onDemand
    periodic
                            InformationReportCharacteristicsType-ReportPeriodicity,
                            InformationReportCharacteristicsType-OnModification,
    onModification
    . . .
InformationReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
                        ReportPeriodicity-Scaledmin,
                        ReportPeriodicity-Scaledhour,
    hours
InformationReportCharacteristicsType-OnModification ::= SEQUENCE
    information-thresholds
                                  InformationThresholds
    ie-Extensions
                                  ProtocolExtensionContainer { { InformationReportCharacteristicsType-OnModification-ExtIEs} } OPTIONAL,
InformationReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
InformationThresholds ::= CHOICE {
    dgps
                        DGPSThresholds,
    . . . ,
    dGANSSThreshold
                        DGANSSThreshold
InformationExchangeID ::= INTEGER (0..1048575)
InformationType ::= SEQUENCE {
    information-Type-Item
                                Information-Type-Item,
    qPSInformation
                                GPS-Information
                                                                                                 OPTIONAL,
    -- The IE shall be present if the Information Type Item IE indicates "GPS Information".
    iE-Extensions
                                ProtocolExtensionContainer { { Information-Type-ExtIEs} } 
                                                                                                 OPTIONAL,
    . . .
Information-Type-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- The following IE shall be present if the Information Type Item IE indicates "GANSS Information"
    { ID id-GANSS-Information
                                        CRITICALITY ignore EXTENSION GANSS-Information
                                                                                                 PRESENCE conditional } |
-- The following IE shall be present if the Information Type Item IE indicates "DGANSS Corrections"
```

```
{ ID id-DGANSS-Corrections-Req
                                                                                                 PRESENCE conditional },
                                        CRITICALITY ignore EXTENSION DGANSS-Corrections-Reg
Information-Type-Item ::= ENUMERATED
    qpsinformation,
    dqpscorrections,
    gpsrxpos,
    qANSSInformation,
    dGANSSCorrections,
    qANSS-RX-Pos
Initial-DL-DPCH-TimingAdjustment-Allowed ::= ENUMERATED {
    initial-DL-DPCH-TimingAdjustment-Allowed
InnerLoopDLPCStatus ::= ENUMERATED {
    active,
    inactive
IPDL-Indicator ::= ENUMERATED {
    active,
    inactive
IPDL-FDD-Parameters ::= SEQUENCE {
    iP-SpacingFDD
                                     ENUMERATED{sp5,sp7,sp10,sp15,sp20,sp30,sp40,sp50,...},
    iP-Length
                                     ENUMERATED{len5, len10},
    seed
                                    INTEGER(0..63),
    burstModeParams
                                    BurstModeParams
                                                        OPTIONAL,
    iP-Offset
                                    INTEGER (0..9),
   iE-Extensions
                                    ProtocolExtensionContainer { { IPDLFDDParameter-ExtIEs} }
                                                                                                 OPTIONAL,
IPDLFDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDL-TDD-Parameters ::= SEQUENCE {
                                     ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
    iP-SpacingTDD
    iP-Start
                                    INTEGER (0..4095),
   iP-Slot
                                    INTEGER(0..14),
    iP-PCCPCH
                                    ENUMERATED{switchOff-1-Frame, switchOff-2-Frames},
    burstModeParams
                                    BurstModeParams
                                                        OPTIONAL,
                            ProtocolExtensionContainer { { IPDLTDDParameter-ExtIEs} }
    iE-Extensions
```

```
IPDL-TDD-Parameters-LCR ::= SEQUENCE
   iP-SpacingTDD
                                  ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
   iP-Start
                                 INTEGER (0..4095),
   iP-Sub
                                 ENUMERATED{first, second, both},
                                 BurstModeParams
                                                    OPTIONAL,
   burstModeParams
                          ProtocolExtensionContainer { { IPDLTDDParameterLCR-ExtIEs} }
   iE-Extensions
                                                                                      OPTIONAL,
IPMulticastIndication ::= SEQUENCE {
   transportLayerAddress
                                 TransportLayerAddress,
   bindingID
                                 BindingID,
   cFNOffset
                                 INTEGER (0..255),
   iE-Extensions
                          ProtocolExtensionContainer { { IPMulticastIndication-ExtIEs} } OPTIONAL,
IPMulticastIndication-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPMulticastDataBearerIndication ::= BOOLEAN
-- true: IP Multicast used, false: IP Multicast not used
BurstModeParams ::= SEQUENCE {
   burstStart
                                     INTEGER (0..15),
   burstLength
                                     INTEGER (10..25),
   burstFreq
                                     INTEGER (1..16),
IPDLTDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLTDDParameterLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IdleIntervalInformation ::= SEQUENCE {
                                             INTEGER{none(0), two(2), three(3)} (0..3),
   idleIntervalInfo-k
   idleIntervalInfo-offset
                                             INTEGER(0..7),
-- -----
```

```
__ ______
-- ------
LimitedPowerIncrease ::= ENUMERATED {
   used.
   not-used
Local-Cell-ID ::= INTEGER (0..268435455)
LTGI-Presence ::= BOOLEAN
-- True = the Long Term Grant Indicator shall be used within E-DCH grants
LCRTDD-Uplink-Physical-Channel-Capability ::= SEQUENCE {
   maxTimeslotsPerSubFrame
                                  INTEGER (1..6),
                                  ENUMERATED {one, two, ..., three, four},
   maxPhysChPerTimeslot
                                  ProtocolExtensionContainer { { LCRTDD-Uplink-Physical-Channel-Capability-ExtIEs} } OPTIONAL,
   iE-Extensions
LCRTDD-Uplink-Physical-Channel-Capability-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- -------
-- ------
MAC-DTX-Cycle-2ms ::= ENUMERATED {v1, v4, v5, v8, v10, v16, v20}
MAC-DTX-Cycle-10ms ::= ENUMERATED {v5, v10, v20}
MAC-ehs-Reset-Timer ::= ENUMERATED {v1, v2, v3, v4,...}
MACdPDU-Size ::= INTEGER (1..5000,...)
   -- In case of E-DCH value 8 and values not multiple of 8 shall not be used
MAC-PDU-SizeExtended ::= INTEGER (1..1504,...,1505)
   -- In case of E-DCH value 1 shall not be used
MAC-Inactivity-Threshold ::= ENUMERATED {v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity}
   -- Unit subframe
MACdPDU-Size-Indexlist ::= SEQUENCE (SIZE (1..maxNrOfMACdPDUIndexes)) OF MACdPDU-Size-IndexItem
MACdPDU-Size-IndexItem ::= SEQUENCE {
                                  MACdPDU-Size,
   macdPDU-Size
   iE-Extensions
                                  OPTIONAL,
```

```
MACdPDU-Size-IndexItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MACdPDU-Size-Indexlist-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify
MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
    macdPDU-Size
                                        MACdPDU-Size,
                                        ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs} }
    iE-Extensions
                                                                                                                         OPTIONAL,
MACdPDU-Size-IndexItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MACesGuaranteedBitRate ::= INTEGER (0..16777215,...,16777216..256000000)
MACes-Maximum-Bitrate-LCR ::= INTEGER (0..256000000,...)
MACeReset-Indicator ::= ENUMERATED {mACeReset}
MAChsGuaranteedBitRate ::= INTEGER (0..16777215,...,16777216..256000000)
MAChsReorderingBufferSize-for-RLC-UM ::= INTEGER (0..300,...)
-- Unit kBytes
MAC-hsWindowSize
                        ::= ENUMERATED {v4, v6, v8, v12, v16, v24, v32,...}
-- For 1.28Mcps TDD when TSN length is configured to 9bits, ENUMERATED (32, 64, 96, 128, 160, 192, 256,...)
MAChsResetScheme ::= ENUMERATED {
    always,
    interNodeB-change
MaximumDL-PowerCapability ::= INTEGER (0..500)
-- Unit dBm, Range OdBm .. 50dBm, Step +0.1dB
Max-Bits-MACe-PDU-non-scheduled ::= INTEGER(1..maxNrOfBits-MACe-PDU-non-scheduled)
Max-EDCH-Resource-Allocation-for-CCCH ::= ENUMERATED {v8, v12, v16, v24, v32, v40, v80, v120,...}
Max-Period-for-Collistion-Resolution ::= INTEGER(8..24,...)
Max-TB-Sizes ::= SEQUENCE {
    maximum-TB-Size-cell-edge-users
                                        INTEGER (0..5000,...),
    maximum-TB-Size-other-users
                                        INTEGER (0..5000,...),
                                        ProtocolExtensionContainer { {Max-TB-Sizes-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
```

1065

```
Max-TB-Sizes-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Maximum-Number-of-Retransmissions-For-E-DCH ::= INTEGER (0..15)
Maximum-Target-ReceivedTotalWideBandPower-LCR ::= INTEGER (0..621)
-- mapping as for RTWP measurement value, as specified in [23]
MaximumTransmissionPower ::= INTEGER(0..500)
-- Unit dBm, Range OdBm .. 50dBm, Step +0.1dB
MaxNrOfUL-DPDCHs ::= INTEGER (1..6)
MaxPRACH-MidambleShifts ::= ENUMERATED {
    shift4,
    shift8,
    . . . ,
    shift16
Max-Set-E-DPDCHs ::= ENUMERATED {
    vN256, vN128, vN64, vN32, vN16, vN8, vN4, v2xN4, v2xN2, v2xN2plus2xN4,
    v2xM2plus2xM4
-- Values related to [8]
Max-UE-DTX-Cycle ::= ENUMERATED {
    v5, v10, v20, v40, v64, v80, v128, v160,
    . . .
MBMS-Capability ::= ENUMERATED{
   mbms-capable,
   mbms-non-capable
MeasurementFilterCoefficient ::= ENUMERATED {k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
-- Measurement Filter Coefficient to be used for measurement
MeasurementID ::= INTEGER (0..1048575)
Measurement-Power-Offset ::= INTEGER(-12 .. 26)
-- Actual value = IE value * 0.5
MeasurementRecoveryBehavior ::= NULL
MeasurementRecoveryReportingIndicator ::= NULL
```

```
MeasurementRecoverySupportIndicator ::= NULL
MessageStructure ::= SEOUENCE (SIZE (1..maxNrOfLevels)) OF
   SEQUENCE {
                              ProtocolIE-ID,
                              RepetitionNumber1
                                                     OPTIONAL,
       repetitionNumber
       iE-Extensions
                              ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
MessageStructure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-CFN ::= INTEGER (0..4095)
MICH-Mode ::= ENUMERATED {
   v18,
   v36,
   v72,
   v144,
    . . . ,
   v16,
   v32,
   v64,
   v128
                              ENUMERATED {v2, v4, v6, v8, v10, v12, v14, v16, ...}
MidambleConfigurationLCR ::=
MidambleConfigurationBurstType1And3 ::=
                                         ENUMERATED {v4, v8, v16}
MidambleConfigurationBurstType2 ::=
                                      ENUMERATED {v3, v6}
MidambleShiftAndBurstType ::=
                                  CHOICE {
                                     SEQUENCE {
       midambleAllocationMode
                                         CHOICE {
           defaultMidamble
                                             NULL,
           commonMidamble
                                             NULL,
           ueSpecificMidamble
                                             MidambleShiftLong,
                                     SEQUENCE
   type2
                                         MidambleConfigurationBurstType2,
       midambleConfigurationBurstType2
       midambleAllocationMode
                                         CHOICE {
           defaultMidamble
                                             NULL,
           commonMidamble
           ueSpecificMidamble
                                             MidambleShiftShort,
```

```
},
    type3
                                         SEQUENCE ·
        midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
        midambleAllocationMode
                                             CHOICE {
            defaultMidamble
                                                 NULL,
            ueSpecificMidamble
                                                 MidambleShiftLong,
        },
MidambleShiftLong ::=
                                     INTEGER (0..15)
MidambleShiftShort ::=
                                     INTEGER (0..5)
MidambleShiftLCR ::= SEQUENCE {
    midambleAllocationMode
                                MidambleAllocationMode,
    midambleShift
                                MidambleShiftLong
                                                         OPTIONAL,
    -- The IE shall be present if the Midamble Allocation Mode IE is set to "UE specific midamble".
    midambleConfigurationLCR
                                     MidambleConfigurationLCR,
    iE-Extensions
                                 ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} }
                                                                                                  OPTIONAL,
    . . .
MidambleAllocationMode ::= ENUMERATED {
    defaultMidamble,
    commonMidamble,
    uESpecificMidamble,
MidambleShiftLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MidambleShiftAndBurstType768 ::=
                                         CHOICE {
                                         SEQUENCE
    type1
        midambleConfigurationBurstType1And3
                                                 MidambleConfigurationBurstType1And3,
        midambleAllocationMode
                                             CHOICE {
            defaultMidamble
                                                 NULL,
            commonMidamble
                                                 NULL,
                                                 MidambleShiftLong,
            ueSpecificMidamble
        . . .
                                         SEOUENCE
    type2
        midambleConfigurationBurstType2-768
                                                 MidambleConfigurationBurstType2-768,
        midamble Allocation Mode
                                             CHOICE
            defaultMidamble
                                                 NULL,
            commonMidamble
                                                 NULL,
                                                 MidambleShiftShort768,
            ueSpecificMidamble
```

```
. . .
    type3
                                        SEQUENCE
        midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
        midambleAllocationMode
                                        CHOICE {
            defaultMidamble
            ueSpecificMidamble
                                                MidambleShiftLong,
        },
        . . .
MidambleConfigurationBurstType2-768 ::=
                                            ENUMERATED {v4, v8}
MidambleShiftShort768 ::=
                                        INTEGER (0..7)
MIMO-ActivationIndicator ::= NULL
MIMO-Capability ::= ENUMERATED {
    mimo-capable,
    mimo-non-capable
MIMO-Mode-Indicator ::= ENUMERATED {
    activate,
    deactivate
MIMO-N-M-Ratio ::= ENUMERATED {v1-2, v2-3, v3-4, v4-5, v5-6, v6-7, v7-8, v8-9, v9-10, v1-1,...}
MIMO-PilotConfiguration ::= CHOICE {
    primary-and-secondary-CPICH
                                            CommonPhysicalChannelID,
    normal-and-diversity-primary-CPICH
                                            NULL,
MIMO-PilotConfigurationExtension ::= CHOICE
    primary-and-secondary-CPICH
                                            PrimaryAndSecondaryCPICHContainer,
    normal-and-diversity-primary-CPICH
                                            NormalAndDiversityPrimaryCPICHContainer,
MIMO-PowerOffsetForS-CPICHCapability ::= ENUMERATED {
    s-CPICH-Power-Offset-Capable,
    s-CPICH-Power-Offset-Not-Capable
MinimumDL-PowerCapability ::= INTEGER(0..800)
```

```
-- Unit dBm, Range -30dBm .. 50dBm, Step +0.1dB
MinimumReducedE-DPDCH-GainFactor ::= ENUMERATED {m8-15, m11-15, m15-15, m21-15, m30-15, m42-15, m60-15, m84-15,...}
MinSpreadingFactor ::= ENUMERATED {
        v4,
       v8,
        v16,
        v32,
        v64,
        v128,
        v256,
        v512
-- TDD Mapping scheme for the minimum spreading factor 1 and 2: "256" means 1, "512" means 2
Modification-Period ::= ENUMERATED { v1280, v2560, v5120, v10240,...}
ModifyPriorityQueue ::= CHOICE {
                                PriorityQueue-InfoItem-to-Add,
    addPriorityQueue
    modifyPriorityQueue
                                PriorityQueue-InfoItem-to-Modify,
    deletePriorityQueue
                                PriorityQueue-Id,
Modulation ::= ENUMERATED {
    aPSK,
    eightPSK,
    -- 8PSK denotes 160AM for S-CCPCH
MinUL-ChannelisationCodeLength ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
    . . .
MultiplexingPosition ::= ENUMERATED {
    fixed.
    flexible
MAChs-ResetIndicator ::= ENUMERATED{
    mAChs-NotReset
ModulationMBSFN ::= ENUMERATED {
    qPSK,
```

```
sixteenQAM,
MBSFN-CPICH-secondary-CCPCH-power-offset ::= INTEGER(-11..4,...)
-- Unit dB, Step 1 dB, Range -11..4 dB.
ModulationPO-MBSFN ::= CHOICE {
   aPSK
                       MBSFN-CPICH-secondary-CCPCH-power-offset,
   sixteenOAM
MBSFN-Only-Mode-Indicator ::= ENUMERATED {
   mBSFN-Only-Mode
MBSFN-Only-Mode-Capability ::= ENUMERATED {
   mBSFN-Only-Mode-capable,
   mBSFN-Only-Mode-non-capable
Multicarrier-Number ::= INTEGER (1..maxHSDPAFrequency)
MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR ::= SEQUENCE (SIZE (1.. maxHSDPAFrequency-1)) OF MultipleFreq-HSPDSCH-InformationItem-
ResponseTDDLCR
--Includes the 2nd through the max number of frequency repetitions.
MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR ::= SEQUENCE{
   hsSCCH-Specific-Information-ResponseTDDLCR
                                                  HSSCCH-Specific-InformationRespListTDDLCR
                                                                                             OPTIONAL,
   hARQ-MemoryPartitioning
                                                  HARQ-MemoryPartitioning
                                                                                             OPTIONAL,
                                                  UARFCN, -- This is the UARFCN for the second and beyond Frequency repetition.
   uARFCN
                                                  ProtocolExtensionContainer { { MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR-ExtIEs } }
   iE-Extensions
       OPTIONAL,
    . . .
MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Multi-Cell-Capability ::= ENUMERATED {
   multi-Cell-Capable,
   multi-Cell-non-Capable
Multi-Cell-Capability-Info::= SEQUENCE {
   multi-Cell-Capability
                                                              Multi-Cell-Capability,
   possible-Secondary-Serving-Cell-List
                                                              Possible-Secondary-Serving-Cell-List
                                                                                                             OPTIONAL,
   iE-Extensions
                               OPTIONAL,
    . . .
Multi-Cell-Capability-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
MIMO-SFMode-For-HSPDSCHDualStream ::= ENUMERATED {
    sF1SF16
__ ______
-- -------
Nack-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [9] subclause 4.2.1
NCyclesPerSFNperiod ::= ENUMERATED {
   v2,
   v4,
   v8,
    . . . ,
   v16,
   v32,
   v64
NRepetitionsPerCyclePeriod ::= INTEGER (2..10)
N-INSYNC-IND ::= INTEGER (1..256)
N-OUTSYNC-IND ::= INTEGER (1..256)
N-PROTECT ::= INTEGER(0...7)
NeighbouringCellMeasurementInformation ::= SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
       CHOICE {
               {\tt neighbouringFDDCellMeasurementInformation}
                                                             NeighbouringFDDCellMeasurementInformation, -- FDD only
               neighbouringTDDCellMeasurementInformation
                                                             NeighbouringTDDCellMeasurementInformation,
               -- Applicable to 3.84Mcps TDD only
               {\tt extension-neighbouringCellMeasurementInformation}
                                                                 Extension-neighbouringCellMeasurementInformation
Extension-neighbouringCellMeasurementInformation
                                                ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformationIE }}
Extension-neighbouringCellMeasurementInformationIE NBAP-PROTOCOL-IES ::= {
    { ID id-neighbouringTDDCellMeasurementInformationLCR
                                                         CRITICALITY reject TYPE NeighbouringTDDCellMeasurementInformationLCR
                                                                                                                                  PRESENCE
mandatory } | -- Applicable to 1.28Mcps TDD only
    { ID id-neighbouringTDDCellMeasurementInformation768
                                                         CRITICALITY reject TYPE NeighbouringTDDCellMeasurementInformation768
                                                                                                                                  PRESENCE
mandatory }, -- Applicable to 7.68Mcps TDD only
NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
```

```
uC-Id
                                        UC-Id,
    uARFCN
                                        UARFCN,
    primaryScramblingCode
                                        PrimaryScramblingCode,
    iE-Extensions
                                        ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
NeighbouringFDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
    uC-Id
                                        UC-Id,
    uARFCN
                                        UARFCN,
    cellParameterID
                                        CellParameterID,
                                        TimeSlot
    timeSlot
                                                                         OPTIONAL,
    midambleShiftAndBurstType
                                        MidambleShiftAndBurstType
                                                                         OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
NeighbouringTDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformationLCR ::= SEQUENCE
                                        UC-Id,
    uARFCN
                                        UARFCN,
    cellParameterID
                                        CellParameterID,
    timeSlotLCR
                                        TimeSlotLCR
                                                                OPTIONAL,
    midambleShiftLCR
                                        MidambleShiftLCR
                                                                OPTIONAL,
                                        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs} } OPTIONAL,
    iE-Extensions
NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformation768 ::= SEQUENCE
    uC-Id
                                        UC-Id,
    uARFCN
                                        UARFCN,
    cellParameterID
                                        CellParameterID,
    timeSlot
                                        TimeSlot
                                                                         OPTIONAL,
    midambleShiftAndBurstType768
                                        MidambleShiftAndBurstType768
                                                                             OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformation768Item-ExtIEs} } OPTIONAL,
NeighbouringTDDCellMeasurementInformation768Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
NI-Information ::= SEQUENCE (SIZE (1..maxNrOfNIs)) OF Notification-Indicator
NonCellSpecificTxDiversity ::= ENUMERATED {
    txDiversity,
    . . .
Non-Serving-RL-Preconfig-Setup ::= SEQUENCE
    new-non-serving-RL-selection New-non-serving-RL-setup-selection,
                                    ProtocolExtensionContainer { {Non-Serving-RL-Preconfig-Setup-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Non-Serving-RL-Preconfig-Setup-ExtIEs NBAP-PROTOCOL-EXTENSION::=
New-non-serving-RL-setup-selection ::= CHOICE {
    new-Serving-RL-in-NodeB
    new-Serving-RL-Not-in-NodeB
                                           NULL,
    new-Serving-RL-in-or-Not-in-NodeB
                                           NULL,
Non-Serving-RL-Preconfig-Info ::= SEQUENCE
    new-non-serving-RL-E-DCH-FDD-DL-Control-Channel-Information-A E-DCH-FDD-DL-Control-Channel-Information OPTIONAL,
    new-non-serving-RL-E-DCH-FDD-DL-Control-Channel-Information-B E-DCH-FDD-DL-Control-Channel-Information OPTIONAL,
    new-non-serving-RL-E-DCH-FDD-DL-Control-Channel-Information-C E-DCH-FDD-DL-Control-Channel-Information OPTIONAL,
    iE-Extensions
                           ProtocolExtensionContainer { {Non-Serving-RL-Preconfig-Info-ExtIEs} } OPTIONAL,
Non-Serving-RL-Preconfig-Info-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
Notification-Indicator ::= INTEGER (0..65535)
NodeB-CommunicationContextID ::= INTEGER (0..1048575)
NormalAndDiversityPrimaryCPICHContainer ::= SEQUENCE {
       iE-Extensions
                                           ProtocolExtensionContainer { { NormalAndDiversityPrimaryCPICHContainer-ExtIEs} } OPTIONAL,
    . . .
NormalAndDiversityPrimaryCPICHContainer-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
NotificationIndicatorLength ::= ENUMERATED {
   v4,
   v8,
   . . .
NumberOfReportedCellPortions ::= INTEGER (1..maxNrOfCellPortionsPerCell,...)
Number-of-PCCH-transmission ::= INTEGER (1..5)
NSubCyclesPerCyclePeriod ::= INTEGER (1..16,...)
N-E-UCCH ::= INTEGER (1..12)
N-E-UCCHLCR ::= INTEGER (1..8)
Number-Of-Supported-Carriers ::= ENUMERATED {
   one-one-carrier,
   one-three-carrier,
   three-three-carrier,
   one-six-carrier,
   three-six-carrier,
   six-six-carrier,
NumHS-SCCH-Codes ::= INTEGER (1..maxNrOfHSSCCHCodes)
NoOfTargetCellHS-SCCH-Order::= INTEGER (1..30)
-- ------
-- -----
Out-of-Sychronization-Window ::= ENUMERATED {
ms40,
ms80,
ms160,
ms320,
ms640,
-- ------
-- ------
PagingIndicatorLength ::= ENUMERATED {
   v2,
   v4,
   v8,
```

```
Paging-MACFlow-ID ::= INTEGER (0..maxNrOfPagingMACFlow-1)
PayloadCRC-PresenceIndicator ::= ENUMERATED {
    cRC-Included,
    cRC-NotIncluded,
    . . .
PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
PDSCH-ID ::= INTEGER (0..255)
PDSCH-ID768 ::= INTEGER (0..511)
PDSCHSet-ID ::= INTEGER (0..255)
PICH-Mode ::= ENUMERATED {
   v18.
   v36,
   v72,
   v144,
PICH-Power ::= INTEGER (-10..5)
-- Unit dB, Range -10dB .. +5dB, Step +1dB
Paging-MACFlows-to-DeleteFDD ::= SEQUENCE (SIZE (1.. maxNrOfPagingMACFlow)) OF Paging-MACFlows-to-DeleteFDD-Item
Paging-MACFlows-to-DeleteFDD-Item ::= SEQUENCE {
    paging-MACFlow-ID
                                                    Paging-MACFlow-ID,
    iE-Extensions
                                                     ProtocolExtensionContainer { { Paging-MACFlows-to-DeleteFDD-Item-ExtIEs} }
       OPTIONAL,
Paging-MACFlows-to-DeleteFDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Paging-MACFlow-Specific-Information ::= SEQUENCE (SIZE (1.. maxNrOfPagingMACFlow)) OF Paging-MAC-Flow-Specific-Information-Item
Paging-MAC-Flow-Specific-Information-Item ::= SEQUENCE {
    paging-MACFlow-Id
                                                    Paging-MACFlow-ID,
    hSDPA-associated-PICH-Info
                                                    HSDPA-Associated-PICH-Information,
```

```
bindingID
                                               BindingID
                                                                                       OPTIONAL,
   transportLayerAddress
                                               TransportLayerAddress
                                                                                       OPTIONAL,
   tnl-gos
                                               TnlOos
                                                                                       OPTIONAL,
   toAWS
                                               ToAWS,
                                               TOAWE.
   paging-MACFlow-PriorityOueue-Information
                                               Paging-MACFlow-PriorityOueue-Information
                                                                                       OPTIONAL,
                                               ProtocolExtensionContainer { { Paging-MAC-Flow-Specific-Information-Item-ExtIEs } }
   iE-Extensions
   OPTIONAL,
Paging-MAC-Flow-Specific-Information-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional },
-- This IE should not be contained if the MAC flow is setup in procedure, and it should be contained if the MAC flow is modified in procedure.
Paging-MACFlow-PriorityQueue-Information ::= SEQUENCE (SIZE (1..maxNrOfpagingMACQueues)) OF Paging-MACFlow-PriorityQueue-Item
Paging-MACFlow-PriorityQueue-Item ::= SEQUENCE {
   priority-Queue-Information-for-Enhanced-PCH
                                               Priority-Queue-Information-for-Enhanced-FACH-PCH,
       iE-Extensions
                                                   OPTIONAL,
   . . .
Paging-MACFlow-PriorityOueue-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PhysicalChannelID-for-CommonERNTI-RequestedIndicator ::= ENUMERATED {
   requested
PLCCHsequenceNumber ::= INTEGER (0..14)
PLCCHinformation ::= SEQUENCE {
   commonPhysicalChannelID
                                        CommonPhysicalChannelID,
   sequenceNumber
                                        PLCCHsequenceNumber,
   iE-Extensions
                                        ProtocolExtensionContainer { { PLCCHinformation-ExtIEs} }
                                                                                                             OPTIONAL,
PLCCHinformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
Possible-Secondary-Serving-Cell-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Possible-Secondary-Serving-Cell
Possible-Secondary-Serving-Cell ::= SEQUENCE {
   local-Cell-ID
                            Local-Cell-ID,
   iE-Extensions
                             ProtocolExtensionContainer { { Possible-Secondary-Serving-Cell-ExtIEs } }
                                                                                                                    OPTIONAL,
```

```
Possible-Secondary-Serving-Cell-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
PowerOffset ::= INTEGER (0..24)
-- PowerOffset = offset * 0.25
-- Unit dB, Range 0dB .. +6dB, Step +0.25dB
PowerOffsetForSecondaryCPICHforMIMO ::= INTEGER (-6..0)
-- Unit dB, Range -6dB .. 0dB, Step +1dB
PowerRaiseLimit ::= INTEGER (0..10)
PRACH-Midamble ::= ENUMERATED {
    inverted,
    direct,
    . . .
PRC ::= INTEGER (-2047..2047)
--pseudo range correction; scaling factor 0.32 meters
PRCDeviation ::= ENUMERATED {
   one,
   two,
   five,
   ten,
PrecodingWeightSetRestriction ::= ENUMERATED {
    preferred,
    not-preferred
PreambleSignatures ::= BIT STRING {
                                     signature15(0),
                                     signature14(1),
                                     signature13(2),
                                     signature12(3),
                                     signature11(4),
                                     signature10(5),
                                     signature9(6),
                                     signature8(7),
                                     signature7(8),
                                     signature6(9),
                                     signature5(10),
```

```
signature4(11),
                                    signature3(12),
                                    signature2(13),
                                    signature1(14),
                                    signature0(15)
                                    } (SIZE (16))
PreambleThreshold ::= INTEGER (0..72)
-- 0= -36.0dB, 1= -35.5dB, ..., 72= 0.0dB
PredictedSFNSFNDeviationLimit ::=INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
PredictedTUTRANGPSDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
PrimaryAndSecondaryCPICHContainer ::= SEQUENCE {
    power-Offset-For-Secondary-CPICH-for-MIMO
                                                    PowerOffsetForSecondaryCPICHforMIMO,
                                        ProtocolExtensionContainer { { PrimaryAndSecondaryCPICHContainer-ExtIEs} } OPTIONAL,
    iE-Extensions
PrimaryAndSecondaryCPICHContainer-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCPICH-Power ::= INTEGER(-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm
Primary-CPICH-Usage-for-Channel-Estimation ::= ENUMERATED
  primary-CPICH-may-be-used,
   primary-CPICH-shall-not-be-used
PrimaryScramblingCode ::= INTEGER (0..511)
PriorityLevel
                            ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority
Priority-Queue-Information-for-Enhanced-FACH-PCH ::= SEQUENCE {
                                        PriorityQueue-Id,
    priorityQueue-Id
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
```

```
mAC-ehs-Reset-Timer
                                       MAC-ehs-Reset-Timer,
    -- shall be ignored in case of Enhanced PCH
   discardTimer
                                       DiscardTimer
                                                                              OPTIONAL.
   mAC-hsWindowSize
                                       MAC-hsWindowSize.
   maximum-MACcPDU-Size
                                       MAC-PDU-SizeExtended.
                                       ProtocolExtensionContainer { { Priority-Oueue-Information-for-Enhanced-FACH-PCH-ExtIEs } }
   iE-Extensions
   OPTIONAL,
    . . .
Priority-Queue-Information-for-Enhanced-FACH-PCH-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PriorityOueue-Id ::= INTEGER (0..maxNrOfPriorityOueues-1)
PriorityOueue-InfoList ::= SEQUENCE (SIZE (1..maxNrOfPriorityOueues)) OF PriorityOueue-InfoItem
PriorityOueue-InfoItem ::= SEQUENCE {
   priorityOueueId
                                       PriorityOueue-Id,
    associatedHSDSCH-MACdFlow
                                       HSDSCH-MACdFlow-ID,
                                       SchedulingPriorityIndicator,
    schedulingPriorityIndicator
                                       DiscardTimer
   discardTimer
                                                                  OPTIONAL,
   mAC-hsWindowSize
                                       MAC-hsWindowSize,
   mAChsGuaranteedBitRate
                                       MAChsGuaranteedBitRate
                                                                                                                 OPTIONAL,
   macdPDU-Size-Index
                                       MACdPDU-Size-Indexlist,
   rLC-Mode
                                       RLC-Mode,
                                       ProtocolExtensionContainer { { PriorityOueue-InfoItem-ExtIEs} }
   iE-Extensions
                                                                                                                     OPTIONAL,
PriorityQueue-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
     ID id-MaximumMACdPDU-SizeExtended
                                                                                                                 PRESENCE optional } |
                                           CRITICALITY reject
                                                                  EXTENSION MAC-PDU-SizeExtended
     ID id-DL-RLC-PDU-Size-Format
                                               CRITICALITY ignore
                                                                      EXTENSION
                                                                                DL-RLC-PDU-Size-Format
                                                                                                                 PRESENCE optional }.
    . . .
PriorityQueue-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF ModifyPriorityQueue
PriorityQueue-InfoItem-to-Add ::= SEQUENCE {
   priorityOueueId
                                       PriorityQueue-Id,
   associatedHSDSCH-MACdFlow
                                       HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                       SchedulingPriorityIndicator,
   discardTimer
                                       DiscardTimer
                                                                                                  OPTIONAL
   mAC-hsWindowSize
                                       MAC-hsWindowSize,
   mAChsGuaranteedBitRate
                                       MAChsGuaranteedBitRate
                                                                                                  OPTIONAL,
   macdPDU-Size-Index
                                       MACdPDU-Size-Indexlist,
   rLC-Mode
                                       iE-Extensions
                                                                                                                     OPTIONAL,
    . . .
```

3GPP TS 25.433 version 8.11.0 Release 8

```
PriorityQueue-InfoItem-to-Add-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-MaximumMACdPDU-SizeExtended
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                 MAC-PDU-SizeExtended
                                                                                                                          PRESENCE optional |
      ID id-DL-RLC-PDU-Size-Format
                                                CRITICALITY ignore
                                                                         EXTENSION
                                                                                     DL-RLC-PDU-Size-Format
                                                                                                                      PRESENCE optional },
PriorityQueue-InfoItem-to-Modify ::= SEQUENCE {
    prioritvOueueId
                                        PriorityOueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                                                                      OPTIONAL,
                                                                                                                      OPTIONAL,
    discardTimer
                                        DiscardTimer
                                                                                                                      OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize
                                                                                                                      OPTIONAL,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                                                                      OPTIONAL.
    macdPDU-Size-Index-to-Modify
                                        MACdPDU-Size-Indexlist-to-Modify
                                                                                                                      OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { PriorityOueue-InfoItem-to-Modify-ExtIEs} } }
                                                                                                                          OPTIONAL,
PriorityOueue-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
      ID id-MaximumMACdPDU-SizeExtended
                                                                                                                      PRESENCE optional } |
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                 MAC-PDU-SizeExtended
     ID id-DL-RLC-PDU-Size-Format
                                            CRITICALITY ignore
                                                                     EXTENSION
                                                                                 DL-RLC-PDU-Size-Format
                                                                                                                      PRESENCE optional },
    . . .
PriorityQueue-InfoList-to-Modify-Unsynchronised ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF PriorityQueue-InfoItem-to-Modify-Unsynchronised
PriorityOueue-InfoItem-to-Modify-Unsynchronised ::= SEOUENCE {
    priorityOueueId
                                        PriorityOueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
        OPTIONAL,
                                        DiscardTimer
    discardTimer
        OPTIONAL,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
       OPTIONAL,
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Modify-Unsynchronised-ExtIEs} }
    iE-Extensions
    OPTIONAL,
PriorityQueue-InfoItem-to-Modify-Unsynchronised-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCCPCH-RSCP ::= INTEGER (0..91)
-- Mapping of non-negative values according to [23]
PrimaryCCPCH-RSCP-Delta ::= INTEGER (-5..-1,...)
-- Mapping of negative values according to [23]
PropagationDelay ::= INTEGER (0..255)
-- Unit: chips, step size 3 chips
-- example: 0 = 0chip, 1 = 3chips
PRXdes-base ::= INTEGER (-112..-50)
```

```
-- Unit: dBm, step size 1
SCH-TimeSlot ::= INTEGER (0..6)
PunctureLimit ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100%
-- 0 is not applicable for E-DPCH
PUSCH-ID ::= INTEGER (0..255)
UE-Selected-MBMS-Service-Information ::= CHOICE {
    selected-MBMS-Service
                                   Selected-MBMS-Service.
Selected-MBMS-Service ::= SEQUENCE {
    selected-MBMS-Service-List
                                           Selected-MBMS-Service-List,
                                            ProtocolExtensionContainer { { Selected-MBMS-Service-ExtIEs} }
   iE-Extensions
                                                                                                                        OPTIONAL,
Selected-MBMS-Service-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Selected-MBMS-Service-List ::= SEOUENCE (SIZE (1.. maxMBMSServiceSelect)) OF Selected-MBMS-Service-Item
Selected-MBMS-Service-Item ::= SEQUENCE {
    selected-MBMS-Service-TimeSlot-Information-LCR
                                                           Selected-MBMS-Service-TimeSlot-Information-LCR
                                                                                                                        OPTIONAL,
   mBMS-Service-TDM-Information
                                           MBMS-Service-TDM-Information
                                                                                OPTIONAL,
                                           ProtocolExtensionContainer { { Selected-MBMS-Service-Item-ExtIEs} }
   iE-Extensions
                                                                                                                        OPTIONAL,
Selected-MBMS-Service-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Selected-MBMS-Service-TimeSlot-Information-LCR ::= SEQUENCE (SIZE (1..7)) OF TimeSlotLCR
MBMS-Service-TDM-Information ::= SEQUENCE {
                                       ENUMERATED {v10, v20, v40, v80,...},
    transmission-Time-Interval
    tDM-Rep
                           INTEGER (2..9),
    tDM-Offset
                          INTEGER (0..8),
    tDM-Length
                           INTEGER (1..8),
   iE-Extensions
                                            ProtocolExtensionContainer { MBMS-Service-TDM-Information-ExtIEs} }
                                                                                                                        OPTIONAL,
MBMS-Service-TDM-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
PUSCHSet-ID ::= INTEGER (0..255)
Paging-MACFlow-Specific-InformationLCR ::= SEQUENCE (SIZE (1.. maxNrOfPagingMACFlow)) OF Paging-MAC-Flow-Specific-Information-ItemLCR
Paging-MAC-Flow-Specific-Information-ItemLCR ::= SEQUENCE {
    paging-MACFlow-Id
                                                     Paging-MACFlow-ID,
    hSDPA-associated-PICH-InfoLCR
                                                     HSDPA-Associated-PICH-InformationLCR
                                                                                                 OPTIONAL,
    bindingID
                                                     BindingID
                                                                                                 OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                                 OPTIONAL,
    tnl-qos
                                                     TnlQos
                                                                                                 OPTIONAL,
    toAWS
                                                     TOAWS
                                                                                                 OPTIONAL,
    toAWE
                                                     TOAWE
                                                                                                 OPTIONAL,
    paging-MACFlow-PriorityQueue-InformationLCR
                                                     Paging-MACFlow-PriorityOueue-Information
                                                                                                 OPTIONAL,
    transportBearerRequestIndicator
                                                     TransportBearerRequestIndicator
                                                                                                 OPTIONAL,
                                                     ProtocolExtensionContainer { { Paging-MAC-Flow-Specific-Information-ItemLCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
Paging-MAC-Flow-Specific-Information-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Paging-MACFlows-to-DeleteLCR ::= SEQUENCE (SIZE (1.. maxNrOfPagingMACFlow)) OF Paging-MACFlows-to-DeleteLCR-Item
Paging-MACFlows-to-DeleteLCR-Item ::= SEQUENCE {
    paging-MACFlow-ID
                                                     Paging-MACFlow-ID,
                                                     ProtocolExtensionContainer { { Paging-MACFlows-to-DeleteLCR-Item-ExtIEs} }
    iE-Extensions
        OPTIONAL,
    . . .
Paging-MACFlows-to-DeleteLCR-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Process-Memory-Size ::= ENUMERATED {
                                        hms800, hms1600, hms2400, hms3200, hms4000,
                                        hms4800, hms5600, hms6400, hms7200, hms8000,
                                        hms8800, hms9600, hms10400, hms11200, hms12000,
                                        hms12800, hms13600, hms14400, hms15200, hms16000,
                                        hms17600, hms19200, hms20800, hms22400, hms24000,
                                        hms25600, hms27200, hms28800, hms30400, hms32000,
                                        hms36000, hms40000, hms44000, hms48000, hms52000,
                                        hms56000, hms60000, hms64000, hms68000, hms72000,
                                        hms76000, hms80000, hms88000, hms96000, hms104000,
                                        hms112000, hms120000, hms128000, hms136000, hms144000,
                                        hms152000, hms160000, hms176000, hms192000, hms208000,
                                        hms224000, hms240000, hms256000, hms272000, hms288000,
                                        hms304000,...}
```

```
-- -----
OE-Selector ::= ENUMERATED {
   selected,
   non-selected
-- -----
RACH-Measurement-Result ::= ENUMERATED {
   cpich-EcNo,
   cpich-RSCP,
   pathloss,
RACH-SlotFormat ::= ENUMERATED
   v0,
   v1,
   v2,
   v3,
RACH-SubChannelNumbers ::= BIT STRING {
                                     subCh11(0),
                                     subCh10(1),
                                     subCh9(2),
                                     subCh8(3),
                                     subCh7(4),
                                     subCh6(5),
                                     subCh5(6),
                                     subCh4(7),
                                     subCh3(8),
                                     subCh2(9),
                                     subCh1(10),
                                     subCh0(11)
                                     } (SIZE (12))
RL-Specific-DCH-Info ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF RL-Specific-DCH-Info-Item
RL-Specific-DCH-Info-Item ::= SEQUENCE {
   dCH-id
                         DCH-ID.
   bindingID
                         BindingID
                                                                                         OPTIONAL,
   transportlayeraddress TransportLayerAddress
                                                                                         OPTIONAL,
   iE-Extensions
                          ProtocolExtensionContainer { { RL-Specific-DCH-Info-Item-ExtIEs} }
                                                                                        OPTIONAL,
RL-Specific-DCH-Info-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

PRESENCE optional

```
ID id-TransportBearerNotRequestedIndicator
                                                    CRITICALITY ignore EXTENSION TransportBearerNotRequestedIndicator
    }, -- FDD only
    . . .
RL-Specific-E-DCH-Info ::= SEQUENCE {
    rL-Specific-E-DCH-Information
                                        RL-Specific-E-DCH-Information,
    e-AGCH-PowerOffset
                                        E-AGCH-PowerOffset
                                                                                     OPTIONAL,
    e-RGCH-PowerOffset
                                        E-RGCH-PowerOffset
                                                                                     OPTIONAL,
                                        E-HICH-PowerOffset
    e-HICH-PowerOffset
                                                                                     OPTIONAL,
                           ProtocolExtensionContainer { { RL-Specific-E-DCH-Info-Item-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
RL-Specific-E-DCH-Info-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Specific-E-DCH-Information ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF RL-Specific-E-DCH-Information-Item
RL-Specific-E-DCH-Information-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                           E-DCH-MACdFlow-ID,
    bindingID
                            BindingID
                                                                        OPTIONAL,
    transportlayeraddress TransportLayerAddress
                                                                        OPTIONAL,
    iE-Extensions
                            ProtocolExtensionContainer { { RL-Specific-E-DCH-Information-Item-ExtIEs} } OPTIONAL,
RL-Specific-E-DCH-Information-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s
Reference-ReceivedTotalWideBandPower ::= INTEGER (0..621)
-- mapping as for RTWP measurement value, as specified in [22]
Reference-ReceivedTotalWideBandPowerReporting::= ENUMERATED {
    reference-ReceivedTotalWideBandPower-Requested
Reference-ReceivedTotalWideBandPowerSupportIndicator::= ENUMERATED {
    indication-of-Reference-ReceivedTotalWideBandPower-supported
ReferenceClockAvailability ::= ENUMERATED {
    available,
    notAvailable
ReferenceSFNoffset ::= INTEGER (0..255)
```

```
Reference-E-TFCI-Information ::= SEOUENCE (SIZE (1..maxNrOfRefETFCIs)) OF Reference-E-TFCI-Information-Item
Reference-E-TFCI-Information-Item ::= SEQUENCE {
    reference-E-TFCI
    -- The following IE shall be ignored if id-Ext-Reference-E-TFCI-PO is present in Reference-E-TFCI-Information-Item-ExtIEs
    reference-E-TFCI-PO
                                  Reference-E-TFCI-PO,
   iE-Extensions
                                   ProtocolExtensionContainer { { Reference-E-TFCI-Information-Item-ExtIEs} }
Reference-E-TFCI-Information-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- The following IE shall be present if the ref E-TFCI power offset to be signalled exceeds maxNrOfRefETFCI-PO-OUANTSTEPs
   { ID id-Ext-Reference-E-TFCI-PO
                                       CRITICALITY reject
                                                                EXTENSION Ext-Reference-E-TFCI-PO
                                                                                                                        PRESENCE optional },
    . . .
Reference-E-TFCI-PO ::= INTEGER (0.. maxNrOfRefETFCI-PO-OUANTSTEPs)
RepetitionLength ::= INTEGER (1..63)
RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4.
    v8.
    v16,
    v32,
    v64,
    . . .
RepetitionNumber0 ::= INTEGER (0..255)
RepetitionNumber1 ::= INTEGER (1..256)
RefTFCNumber ::= INTEGER (0..3)
ReportCharacteristics ::= CHOICE {
    onDemand
                        NULL,
    periodic
                        ReportCharacteristicsType-ReportPeriodicity,
    event-a
                        ReportCharacteristicsType-EventA,
                        ReportCharacteristicsType-EventB,
    event-b
                        ReportCharacteristicsType-EventC,
    event-c
                        ReportCharacteristicsType-EventD,
    event-d
    event-e
                        ReportCharacteristicsType-EventE,
    event-f
                        ReportCharacteristicsType-EventF,
    extension-ReportCharacteristics
                                        Extension-ReportCharacteristics
Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}
Extension-ReportCharacteristicsIE NBAP-PROTOCOL-IES ::= {
```

PRESENCE

```
{ ID id-ReportCharacteristicsType-OnModification
                                                         CRITICALITY reject TYPE ReportCharacteristicsType-OnModification
mandatory }
ReportCharacteristicsType-EventA ::= SEQUENCE {
    measurementThreshold
                                     ReportCharacteristicsType-MeasurementThreshold,
    measurementHysteresisTime
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                                                          OPTIONAL,
    iE-Extensions
                                     ProtocolExtensionContainer { { ReportCharacteristicsType-EventA-ExtIEs} } 
                                                                                                                          OPTIONAL,
ReportCharacteristicsType-EventA-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventB ::= SEQUENCE {
    measurementThreshold
                                     ReportCharacteristicsType-MeasurementThreshold,
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
    measurementHysteresisTime
                                                                                                                          OPTIONAL,
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventB-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
ReportCharacteristicsType-EventB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
ReportCharacteristicsType-EventC ::= SEQUENCE {
    measurementIncreaseThreshold
                                    ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime
                                    ReportCharacteristicsType-ScaledMeasurementChangeTime,
                                     ProtocolExtensionContainer { { ReportCharacteristicsType-EventC-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
ReportCharacteristicsType-EventC-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventD ::= SEQUENCE {
    measurementDecreaseThreshold
                                    ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime
                                     ReportCharacteristicsType-ScaledMeasurementChangeTime,
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventD-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL,
ReportCharacteristicsType-EventD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventE ::= SEQUENCE {
    measurementThreshold1
                                     ReportCharacteristicsType-MeasurementThreshold,
    measurementThreshold2
                                     ReportCharacteristicsType-MeasurementThreshold
                                                                                                  OPTIONAL,
    measurementHysteresisTime
                                     ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                                 OPTIONAL,
    reportPeriodicity
                                     ReportCharacteristicsType-ReportPeriodicity
                                                                                                  OPTIONAL,
    iE-Extensions
                                     ProtocolExtensionContainer { { ReportCharacteristicsType-EventE-ExtIEs} }
                                                                                                                          OPTIONAL,
```

```
ReportCharacteristicsType-EventE-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventF ::= SEQUENCE {
    measurementThreshold1
                                    ReportCharacteristicsType-MeasurementThreshold,
                                    ReportCharacteristicsType-MeasurementThreshold
    measurementThreshold2
                                                                                                 OPTIONAL,
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                                OPTIONAL,
    measurementHysteresisTime
                                    ReportCharacteristicsType-ReportPeriodicity
    reportPeriodicity
                                                                                                 OPTIONAL,
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventF-ExtIEs} }
    iE-Extensions
                                                                                                                         OPTIONAL,
ReportCharacteristicsType-EventF-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-OnModification ::= SEQUENCE
    measurementThreshold
                                    ReportCharacteristicsType-MeasurementThreshold,
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-OnModification-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
        . . .
ReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= CHOICE {
    received-total-wide-band-power
                                                            Received-total-wide-band-power-Value-IncrDecrThres,
    transmitted-carrier-power
                                    Transmitted-Carrier-Power-Value,
    acknowledged-prach-preambles
                                            Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP
                                    UL-TimeslotISCP-Value-IncrDecrThres.
    sir
                                SIR-Value-IncrDecrThres.
    sir-error
                                SIR-Error-Value-IncrDecrThres.
    transmitted-code-power
                                    Transmitted-Code-Power-Value-IncrDecrThres,
                                    RSCP-Value-IncrDecrThres,
    round-trip-time
                                    Round-Trip-Time-IncrDecrThres,
    notUsed-1-acknowledged-PCPCH-access-preambles
                                                        NULL,
    notUsed-2-detected-PCPCH-access-preambles
                                                        NULL.
    extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold
                                                                                     Extension-ReportCharacteristicsType-
MeasurementIncreaseDecreaseThreshold
Extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsType-
MeasurementIncreaseDecreaseThresholdIE }}
Extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThresholdIE NBAP-PROTOCOL-IES ::= {
{ ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmission
                                                                             CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue PRESENCE mandatory}
                                                        CRITICALITY reject TYPE Transmitted-Carrier-Power-Value
{ ID id-Transmitted-Carrier-Power-For-CellPortion
                                                                                                                         PRESENCE mandatory } |
```

```
{ ID id-Received-total-wide-band-power-For-CellPortion CRITICALITY reject TYPE Received-total-wide-band-power-Value-IncrDecrThres
    PRESENCE mandatory } |
 ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortion
                                                                                                                    CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue
                                                                    PRESENCE mandatory } |
  ID id-UpPTSInterferenceValue
                                    CRITICALITY reject TYPE
                                                                UpPTSInterferenceValue
                                                                                                                         PRESENCE mandatory }
                                                                                                                         PRESENCE mandatory }
 ID id-Received-Scheduled-EDCH-Power-Share
                                                CRITICALITY reject TYPE RSEPS-Value-IncrDecrThres
 ID id-Received-Scheduled-EDCH-Power-Share-For-CellPortion CRITICALITY reject TYPE RSEPS-Value-IncrDecrThres
                                                                                                                         PRESENCE mandatory }
 ID id-EDCH-RACH-Report-IncrDecrThres
                                                            CRITICALITY reject TYPE EDCH-RACH-Report-IncrDecrThres
                                                                                                                         PRESENCE mandatory }
    -- FDD only
EDCH-RACH-Report-IncrDecrThres ::= SEQUENCE
    denied-EDCH-RACH-resources
                                    Denied-EDCH-RACH-Resources-Value,
    iE-Extensions
                        ProtocolExtensionContainer { { EDCH-RACH-Report-IncrDecrThres-ExtIEs } } OPTIONAL,
EDCH-RACH-Report-IncrDecrThres-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Granted-EDCH-RACH-Resources-Value ::= INTEGER(0..240,...)
-- According to mapping in [25].
Denied-EDCH-RACH-Resources-Value ::= INTEGER(0..240,...)
-- According to mapping in [25].
ReportCharacteristicsType-MeasurementThreshold ::= CHOICE
    received-total-wide-band-power
                                                            Received-total-wide-band-power-Value,
    transmitted-carrier-power
                                    Transmitted-Carrier-Power-Value,
    acknowledged-prach-preambles
                                            Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP
                                    UL-TimeslotISCP-Value,
    sir
                                SIR-Value,
                                SIR-Error-Value,
    sir-error
    transmitted-code-power
                                    Transmitted-Code-Power-Value,
                                    RSCP-Value,
    rx-timing-deviation
                                    Rx-Timing-Deviation-Value,
    round-trip-time
                                    Round-Trip-Time-Value,
    notUsed-1-acknowledged-PCPCH-access-preambles
                                                        NULL,
    notUsed-2-detected-PCPCH-access-preambles
                                                        NULL,
    extension-ReportCharacteristicsType-MeasurementThreshold
                                                                    Extension-ReportCharacteristicsType-MeasurementThreshold
Extension-ReportCharacteristicsTvpe-MeasurementThreshold
                                                            ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsType-
MeasurementThresholdIE }}
Extension-ReportCharacteristicsType-MeasurementThresholdIE NBAP-PROTOCOL-IES ::= {
    { ID id-TUTRANGPSMeasurementThresholdInformation
                                                        CRITICALITY reject TYPE TUTRANGPSMeasurementThresholdInformation
                                                                                                                                        PRESENCE
mandatory } |
    { ID id-SFNSFNMeasurementThresholdInformation
                                                        CRITICALITY reject TYPE SFNSFNMeasurementThresholdInformation
                                                                                                                                        PRESENCE
mandatory } |
    { ID id-Rx-Timing-Deviation-Value-LCR
                                                        CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR
                                                                                                                                        PRESENCE
mandatory}|
```

```
{ ID id-HS-SICH-Reception-Quality-Measurement-Value CRITICALITY reject TYPE HS-SICH-Reception-Quality-Measurement-Value PRESENCE mandatory}
   -- For 1.28Mcps TDD, used when the Measurement Threshold Value for HS-SICH Reception Quality are less than or equal to 20
   { ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmission CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue PRESENCE mandatory}
   { ID id-HS-DSCHRequiredPowerValue
                                                 CRITICALITY reject TYPE HS-DSCHRequiredPowerValue
                                                                                                                        PRESENCE
mandatory} |
   PRESENCE
    { ID id-Received-total-wide-band-power-For-CellPortion CRITICALITY reject TYPE Received-total-wide-band-power-Value
                                                                                                                 PRESENCE mandatory
    { ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortion
                                                                                                           CRITICALITY reject
                                                                                                                             TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue
                                                            PRESENCE mandatory }
   { ID id-UpPTSInterferenceValue
                                                 CRITICALITY reject TYPE UppTSInterferenceValue
                                                                                                                        PRESENCE
mandatory } |
   { ID id-DLTransmissionBranchLoadValue
                                               CRITICALITY reject TYPE DLTransmissionBranchLoadValue
   PRESENCE mandatory } |
   PRESENCE mandatory }
   { ID id-E-DCH-Non-serving-Relative-Grant-Down-CommandsValue
                                                            CRITICALITY reject TYPE E-DCH-Non-serving-Relative-Grant-Down-Commands
       PRESENCE mandatory }
    { ID id-Rx-Timing-Deviation-Value-768
                                                 CRITICALITY reject TYPE Rx-Timing-Deviation-Value-768
                                                                                                                        PRESENCE
mandatory } |
   { ID id-Rx-Timing-Deviation-Value-384-ext
                                                 CRITICALITY reject TYPE Rx-Timing-Deviation-Value-384-ext
                                                                                                                        PRESENCE
mandatory }|
    { ID id-Extended-Round-Trip-Time-Value
                                                     CRITICALITY reject TYPE Extended-Round-Trip-Time-Value
                                                                                                                        PRESENCE
mandatory }|
   { ID id-Received-Scheduled-EDCH-Power-Share
                                                         CRITICALITY reject TYPE RSEPS-Value-IncrDecrThres
                                                                                                                        PRESENCE
mandatory } |
    { ID id-Received-Scheduled-EDCH-Power-Share-For-CellPortion CRITICALITY reject TYPE RSEPS-Value-IncrDecrThres
                                                                                                                        PRESENCE
mandatory }|
   { ID id-Additional-HS-SICH-Reception-Quality-Measurement-Value CRITICALITY reject TYPE HS-SICH-Reception-Quality-Measurement-Value
      PRESENCE mandatory \
   -- Applicable to 1.28Mcps TDD only, used when the Measurement Threshold Value for HS-SICH Reception Quality are more than 20, Measurement
Threshold Value = 20 + IE Value
   PRESENCE mandatory
} |
   { ID id-EDCH-RACH-Report-ThresholdInformation
                                                 CRITICALITY reject TYPE EDCH-RACH-Report-ThresholdInformation
                                                                                                                        PRESENCE
mandatory }
   -- FDD only
EDCH-RACH-Report-ThresholdInformation ::= SEQUENCE {
   denied-EDCH-RACH-resources
                               Denied-EDCH-RACH-Resources-Value,
                     ProtocolExtensionContainer { { EDCH-RACH-Report-ThresholdInformation-ExtIEs } } OPTIONAL,
   iE-Extensions
       . . .
EDCH-RACH-Report-ThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-ScaledMeasurementChangeTime ::= CHOICE {
                     MeasurementChangeTime-Scaledmsec,
   msec
   . . .
```

```
MeasurementChangeTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementChangeTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms
ReportCharacteristicsType-ScaledMeasurementHysteresisTime ::= CHOICE {
                        MeasurementHysteresisTime-Scaledmsec,
    . . .
MeasurementHysteresisTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementHysteresisTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms
ReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
                        ReportPeriodicity-Scaledmsec,
    msec
                        ReportPeriodicity-Scaledmin,
   min
    . . .
ReportPeriodicity-Scaledmsec ::= INTEGER (1..6000,...)
-- ReportPeriodicity-msec = ReportPeriodicity * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms
ReportPeriodicity-Scaledmin ::= INTEGER (1..60,...)
-- Unit min, Range 1min .. 60min(hour), Step 1min
ReportPeriodicity-Scaledhour ::= INTEGER (1..24,...)
-- Unit hour, Range 1hour .. 24hours (day), Step 1hour
ResourceOperationalState ::= ENUMERATED {
    enabled,
    disabled
RL-ID ::= INTEGER (0..31)
RL-Set-ID
                       ::= INTEGER (0..31)
RLC-Mode
           ::= ENUMERATED {
   rLC-AM,
    rLC-UM,
DL-RLC-PDU-Size-Format ::= ENUMERATED {
    fixed-RLC-PDU-Size,
    flexible-RLC-PDU-Size,
Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)
```

```
RNC-ID
                        ::= INTEGER (0..4095)
Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [22]
RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]
RSCP-Value-IncrDecrThres ::= INTEGER (0..126)
Received-total-wide-band-power-For-CellPortion-Value ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Received-total-wide-band-power-For-
CellPortion-Value-Item
Received-total-wide-band-power-For-CellPortion-Value-Item ::= SEQUENCE{
    cellPortionID
                                            CellPortionID,
    received-total-wide-band-power-value
                                            Received-total-wide-band-power-Value,
                                            ProtocolExtensionContainer { { Received-total-wide-band-power-For-CellPortion-Value-Item-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
Received-total-wide-band-power-For-CellPortion-Value-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Received-total-wide-band-power-Value ::= INTEGER(0..621)
-- According to mapping in [22]/[23]
Received-total-wide-band-power-Value-IncrDecrThres ::= INTEGER (0..620)
Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Received-Scheduled-EDCH-Power-
Share-For-CellPortion-Value-Item
Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value-Item ::= SEQUENCE{
    cellPortionID
                                            CellPortionID,
    received-Scheduled-power-share-value
                                            RSEPS-Value,
    received-total-wide-band-power-value
                                            Received-total-wide-band-power-Value
                                                                                        OPTIONAL,
                                            ProtocolExtensionContainer { { Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value-Item-ExtIEs} }
    iE-Extensions
       OPTIONAL,
    . . .
Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Received-Scheduled-EDCH-Power-Share-Value ::= SEOUENCE{
    received-Scheduled-power-share-value
                                            RSEPS-Value,
    received-total-wide-band-power-value
                                            Received-total-wide-band-power-Value
                                                                                         OPTIONAL,
RSEPS-Value-IncrDecrThres ::= INTEGER (0..151)
```

```
RSEPS-Value ::= INTEGER (0..151)
-- According to mapping in [22]
RequestedDataValueInformation ::= CHOICE {
    informationAvailable
                                InformationAvailable,
                                InformationnotAvailable
    informationnotAvailable
InformationAvailable::= SEQUENCE {
    requesteddataValue
                            RequestedDataValue,
                            ProtocolExtensionContainer { { InformationAvailableItem-ExtIEs} }
    ie-Extensions
                                                                                                                      OPTIONAL,
InformationAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
InformationnotAvailable ::= NULL
RequestedDataValue ::= SEQUENCE {
    dqps-corrections
                            DGPSCorrections
                                                                                             OPTIONAL,
    qps-navandrecovery
                            GPS-NavigationModel-and-TimeRecovery
                                                                                             OPTIONAL,
    gps-ionos-model
                            GPS-Ionospheric-Model
                                                                                             OPTIONAL,
                            GPS-UTC-Model
    qps-utc-model
                                                                                             OPTIONAL,
    gps-almanac
                            GPS-Almanac
                                                                                             OPTIONAL,
                            GPS-RealTime-Integrity
    gps-rt-integrity
                                                                                             OPTIONAL,
    gpsrxpos
                            GPS-RX-POS
                                                                                             OPTIONAL,
    iE-Extensions
                            ProtocolExtensionContainer { { RequestedDataValue-ExtIEs} }
                                                                                              OPTIONAL,
RequestedDataValue-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-GANSS-Common-Data
                                        CRITICALITY ignore
                                                                 EXTENSION GANSS-Common-Data
                                                                                                                          PRESENCE optional } |
     ID id-GANSS-Generic-Data
                                        CRITICALITY ignore
                                                                 EXTENSION GANSS-Generic-Data
    PRESENCE optional },
    . . .
Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
-- According to mapping in [23]
Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..511)
-- According to mapping in [23]
Rx-Timing-Deviation-Value-768 ::= INTEGER (0..65535)
-- According to mapping in [23]
```

1093

```
Rx-Timing-Deviation-Value-384-ext ::= INTEGER (0..32767)
-- According to mapping in [23]
RefBeta ::= INTEGER (-15..16)
RTWP-ReportingIndicator ::= ENUMERATED {
   rTWP-reporting-required}
RTWP-CellPortion-ReportingIndicator ::= ENUMERATED {
   rTWP-CellPortion-reporting-required}
-- -----
-- -----
AdjustmentPeriod
                        ::= INTEGER(1..256)
-- Unit Frame
E-DPCCH-Power-Boosting-Capability ::= ENUMERATED {
   e-DPCCH-Power-Boosting-capable,
   e-DPCCH-Power-Boosting-non-capable
SAT-ID ::= INTEGER (0..63)
SAT-Info-Almanac ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-Almanac-Item
SAT-Info-Almanac-Item ::= SEQUENCE {
   data-id
                 DATA-ID,
   sat-id
                    SAT-ID,
   qps-e-alm
                    BIT STRING (SIZE (16)),
   qps-toa-alm
               BIT STRING (SIZE (8)),
   gps-delta-I-alm BIT STRING (SIZE (16)),
   omegadot-alm
                BIT STRING (SIZE (16)),
   svhealth-alm
                    BIT STRING (SIZE (8)),
   gps-a-sqrt-alm
                    BIT STRING (SIZE (24)),
   omegazero-alm
                    BIT STRING (SIZE (24)),
   m-zero-alm
                    BIT STRING (SIZE (24)),
   gps-omega-alm
                    BIT STRING (SIZE (24)),
   gps-af-zero-alm BIT STRING (SIZE (11)),
   gps-af-one-alm
                    BIT STRING (SIZE (11)),
   ie-Extensions
                    OPTIONAL,
  -- This GPS-Almanac-Information is for the 1st 16 satellites
SAT-Info-Almanac-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                       ::= SEQUENCE (SIZE (1..maxNrOfSatAlmanac-maxNoSat)) OF SAT-Info-Almanac-ExtItem
SAT-Info-Almanac-ExtList
SAT-Info-Almanac-ExtItem
                       ::= SEQUENCE {
```

```
data-id
                     DATA-ID,
   sat-id
                     SAT-ID,
                     BIT STRING (SIZE (16)),
   gps-e-alm
   qps-toa-alm
                     BIT STRING (SIZE (8)),
   gps-delta-I-alm BIT STRING (SIZE (16)),
   omegadot-alm
                     BIT STRING (SIZE (16)),
    svhealth-alm
                     BIT STRING (SIZE (8)),
   gps-a-sgrt-alm
                     BIT STRING (SIZE (24)),
   omegazero-alm
                     BIT STRING (SIZE (24)),
   m-zero-alm
                     BIT STRING (SIZE (24)),
   qps-omega-alm
                     BIT STRING (SIZE (24)),
   gps-af-zero-alm BIT STRING (SIZE (11)),
   qps-af-one-alm
                     BIT STRING (SIZE (11)),
   ie-Extensions
                     OPTIONAL.
  -- Includes the GPS-Almanac-Information for 17^{th} through 32^{nd} satellites.
SAT-Info-Almanac-ExtItemIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
SAT-Info-DGPSCorrections ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-DGPSCorrections-Item
SAT-Info-DGPSCorrections-Item ::= SEOUENCE {
   sat-id
                                          SAT-ID.
   iode-dqps
                                          BIT STRING (SIZE (8)),
   udre
                                          UDRE,
                                          PRC,
   range-correction-rate
                                          Range-Correction-Rate,
   ie-Extensions
                                          ProtocolExtensionContainer { { SAT-Info-DGPSCorrections-Item-ExtIEs} } OPTIONAL,
SAT-Info-DGPSCorrections-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
SATInfo-RealTime-Integrity ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-RealTime-Integrity-Item
SAT-Info-RealTime-Integrity-Item ::= SEQUENCE {
 bad-sat-id
                  SAT-ID,
 ie-Extensions
                 ProtocolExtensionContainer { { SAT-Info-RealTime-Integrity-Item-ExtIEs} }
                                                                                                               OPTIONAL,
SAT-Info-RealTime-Integrity-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ScaledAdjustmentRatio
                              ::= INTEGER (0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100
```

```
MaxAdjustmentStep
                            ::= INTEGER(1..10)
-- Unit Slot
SchedulingInformation
                                ::= ENUMERATED {
    included.
    not-included
SecondaryServingCells ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF SecondaryServingCellsItem
SecondaryServingCellsItem ::= SEQUENCE {
    secondaryC-ID
                                C-ID,
    numSecondaryHS-SCCH-Codes
                                    NumHS-SCCH-Codes
                                                            OPTIONAL,
    sixtyfourQAM-UsageAllowedIndicator
                                            SixtyfourQAM-UsageAllowedIndicator
                                                                                     OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { SecondaryServingCellsItem-ExtIEs} }
    OPTIONAL,
    . . .
SecondaryServingCellsItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SchedulingPriorityIndicator
                                        ::= INTEGER (0..15)
                                                                 -- lowest (0), highest (15)
SID ::= INTEGER (0..maxNrOfMACdPDUIndexes-1)
ScramblingCodeNumber ::= INTEGER (0..15)
Secondary-CPICH-Information-Change ::= CHOICE {
    new-secondary-CPICH
                                        CommonPhysicalChannelID,
    secondary-CPICH-shall-not-be-used NULL,
SecondaryCCPCH-SlotFormat ::= INTEGER(0..17,...)
Secondary-CCPCH-SlotFormat-Extended ::= INTEGER(18..23,...)
Segment-Type ::= ENUMERATED {
        first-segment,
        first-segment-short,
        subsequent-segment,
       last-segment,
       last-segment-short,
        complete-SIB,
        complete-SIB-short,
Serving-E-DCH-RL-ID ::= CHOICE
    serving-E-DCH-RL-in-this-NodeB
                                                Serving-E-DCH-RL-in-this-NodeB,
    serving-E-DCH-RL-not-in-this-NodeB
                                                NULL,
```

```
Serving-E-DCH-RL-in-this-NodeB ::= SEQUENCE {
                                                RL-ID.
   iE-Extensions
                                                ProtocolExtensionContainer { { Serving-E-DCH-RL-in-this-NodeB-ExtIEs} } }
                                                                                                                                        OPTIONAL,
Serving-E-DCH-RL-in-this-NodeB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SetsOfHS-SCCH-Codes ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH)) OF SetsOfHS-SCCH-CodesItem
SetsOfHS-SCCH-CodesItem ::= SEQUENCE {
    hS-SCCH-PreconfiguredCodes
                                    HS-SCCH-PreconfiguredCodes,
    sixtyfourOAM-DL-UsageIndicator
                                        SixtyfourOAM-DL-UsageIndicator
                                                                            OPTIONAL,
    hSDSCH-TBSizeTableIndicator
                                    HSDSCH-TBSizeTableIndicator
                                                                            OPTIONAL,
                                    ProtocolExtensionContainer { { SetsOfHS-SCCH-CodesItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
SetsOfHS-SCCH-CodesItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFN ::= INTEGER (0..4095)
SFNSFN-FDD ::= INTEGER (0..614399)
SFNSFN-TDD ::= INTEGER (0..40961)
SFNSFN-TDD768 ::= INTEGER (0..81923)
SFNSFNChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
SFNSFNDriftRate ::= INTEGER (-100..100)
-- Unit chip/s, Step 1/256 chip/s, Range -100/256..+100/256 chip/s
SFNSFNDriftRateQuality ::= INTEGER (0..100)
-- Unit chip/s, Step 1/256 chip/s, Range 0..100/256 chip/s
SFNSFNMeasurementThresholdInformation::= SEQUENCE {
    sFNSFNChangeLimit
                                       SFNSFNChangeLimit
                                                                            OPTIONAL,
    predictedSFNSFNDeviationLimit
                                        PredictedSFNSFNDeviationLimit
                                                                            OPTIONAL,
                                   ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs} }
    iE-Extensions
                                                                                                                         OPTIONAL,
SFNSFNMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
SFNSFNMeasurementValueInformation ::= SEOUENCE {
    successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation
                                                                                         SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
       SEQUENCE {
           uC-Id
                                        UC-Id,
            sFNSFNValue
                                        SFNSFNValue,
           sFNSFNOuality
                                        SFNSFNOuality
                                                                    OPTIONAL,
           sFNSFNDriftRate
                                        SFNSFNDriftRate,
            sFNSFNDriftRateQuality
                                        SFNSFNDriftRateQuality
                                                                    OPTIONAL,
           sFNSFNTimeStampInformation SFNSFNTimeStampInformation,
                                ProtocolExtensionContainer { { SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
           iE-Extensions
ExtIEs } }
                OPTIONAL,
    unsuccessfull Neighbouring {\tt CellSFNSFNObservedTimeDifferenceMeasurementInformation}
                                                                                         SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
       SEQUENCE {
           uC-Id
                                        UC-Id,
                                ProtocolExtensionContainer { { UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
           iE-Extensions
ExtIEs } }
                OPTIONAL,
                       ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                         OPTIONAL,
SFNSFNMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFNSFNOuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip
ShutdownTimer ::= INTEGER (1..3600)
-- Unit sec
SIB-Originator ::= ENUMERATED {
   nodeB,
    cRNC,
```

3GPP TS 25.433 version 8.11.0 Release 8

OPTIONAL,

```
SIR-Error-Value ::= INTEGER (0..125)
-- According to mapping in [22]
SFNSFNTimeStampInformation ::= CHOICE {
    sFNSFNTimeStamp-FDD
                            SFN,
    sFNSFNTimeStamp-TDD
                            SFNSFNTimeStamp-TDD,
    ...}
SFNSFNTimeStamp-TDD::= SEQUENCE {
    timeSlot
                        TimeSlot,
                                     ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs} }
    iE-Extensions
SFNSFNTimeStamp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFNSFNValue ::= CHOICE
    sFNSFN-FDD
                    SFNSFN-FDD,
    sFNSFN-TDD
                                        --- 1.28Mcps and 3.84Mcps TDD only
                    SFNSFN-TDD,
    sFNSFN-TDD768
                    SFNSFN-TDD768
SIR-Error-Value-IncrDecrThres ::= INTEGER (0..124)
SIR-Value ::= INTEGER (0..63)
-- According to mapping in [22]/[23]
SIR-Value-IncrDecrThres ::= INTEGER (0..62)
SignallingBearerRequestIndicator::= ENUMERATED {bearerRequested}
SixtyfourQAM-UsageAllowedIndicator ::= ENUMERATED {
    allowed,
    not-allowed
SixtyfourQAM-DL-UsageIndicator ::= ENUMERATED {
    sixtyfourQAM-DL-used,
    sixtyfourQAM-DL-not-used
SixtyfourQAM-DL-Capability ::= ENUMERATED {
    sixtyfourQAM-DL-supported,
    sixtyfourQAM-DL-not-supported
```

```
SixtyfourQAM-DL-MIMO-Combined-Capability ::= ENUMERATED {
    sixtyfourQAM-DL-MIMO-Combined-capable,
    sixtyfourQAM-DL-MIMO-Combined-non-capable
SignatureSequenceGroupIndex ::= INTEGER (0..19)
SixteenQAM-UL-Capability ::= ENUMERATED {
    sixteenQAM-UL-capable,
    sixteenQAM-UL-non-capable
SixteenQAM-UL-Operation-Indicator ::= ENUMERATED {
    activate,
    deactivate
SNPL-Reporting-Type ::= ENUMERATED {
    type1,
    type2
Soffset ::= INTEGER (0..9,...)
SpecialBurstScheduling ::= INTEGER (1..256) -- Number of frames between special burst transmission during DTX
Start-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    start-of-audit-sequence,
    not-start-of-audit-sequence
STTD-Indicator ::= ENUMERATED {
    active,
    inactive,
SSDT-SupportIndicator ::= ENUMERATED {
    not-Used-sSDT-Supported,
    sSDT-not-supported
Sub-Frame-Number ::= INTEGER (0..4,...)
SyncCase ::= INTEGER (1..2,...)
SYNCDlCodeId ::= INTEGER (1..32,...)
SyncFrameNumber ::= INTEGER (1..10)
```

```
SynchronisationReportCharacteristics ::= SEQUENCE
    synchronisationReportCharacteristicsType
                                                SynchronisationReportCharacteristicsType,
    synchronisationReportCharactThreExc
                                                SynchronisationReportCharactThreExc
                                                                                        OPTIONAL,
        -- This IE shall be included if the synchronisationReportCharacteristicsType IE is set to 'thresholdExceeding'.
                                                ProtocolExtensionContainer { { SynchronisationReportCharacteristics-ExtIEs } } OPTIONAL,
    iE-Extensions
SynchronisationReportCharacteristics-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-SyncDLCodeIdThreInfoLCR CRITICALITY ignore EXTENSION
                                                                                                 PRESENCE optional },
                                                                    SyncDLCodeIdThreInfoLCR
    . . .
SynchronisationReportCharactThreExc ::=
                                            SEQUENCE (SIZE (1..maxNrOfCellSyncBursts)) OF SynchronisationReportCharactThreInfoItem -- Mandatory
for 3.84Mcps TDD only. Not Applicable to 1.28Mcps TDD.
SynchronisationReportCharactThreInfoItem ::= SEQUENCE {
    syncFrameNumber
                                SyncFrameNumber,
                                SEQUENCE (SIZE (1.. maxNrOfReceptsPerSyncFrame)) OF SynchronisationReportCharactCellSyncBurstInfoItem,
    cellSyncBurstInformation
    iE-Extensions
                                ProtocolExtensionContainer { { SynchronisationReportCharactThreInfoItem-ExtIEs } }
                                                                                                                         OPTIONAL,
    . . .
SynchronisationReportCharactThreInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SynchronisationReportCharactCellSyncBurstInfoItem ::= SEQUENCE
    cellSyncBurstCode
                                    CellSyncBurstCode,
    cellSyncBurstCodeShift
                                    CellSyncBurstCodeShift,
    cellSyncBurstTiming
                                    CellSyncBurstTiming
                                                                    OPTIONAL,
    cellSyncBurstTimingThreshold
                                    CellSyncBurstTimingThreshold
                                                                    OPTIONAL,
                                    ProtocolExtensionContainer { { SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs } }
    iE-Extensions
                                                                                                                                        OPTIONAL,
    . . .
SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SyncDLCodeIdThreInfoLCR ::= SEQUENCE (SIZE (0..maxNrOfSyncFramesLCR)) OF SyncDLCodeIdThreInfoList --Mandatory for 1.28Mcps TDD only. Not
Applicable to 3.84Mcps TDD.
SyncDLCodeIdThreInfoList ::= SEOUENCE {
    syncFrameNoToReceive
                                    SyncFrameNumber,
    syncDLCodeIdInfoLCR
                                    SyncDLCodeInfoListLCR,
                                    ProtocolExtensionContainer { { SyncDLCodeIdThreInfoList-ExtIEs } }
    iE-Extensions
                                                                                                                 OPTIONAL,
SyncDLCodeIdThreInfoList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
SyncDLCodeInfoListLCR ::= SEQUENCE (SIZE (1..maxNrOfSyncDLCodesLCR)) OF SyncDLCodeInfoItemLCR
SyncDLCodeInfoItemLCR ::= SEQUENCE {
    syncDLCodeId
                                        SYNCDlCodeId,
                                        CellSyncBurstTimingLCR
    syncDLCodeIdArrivTime
                                                                                OPTIONAL,
    syncDLCodeIdTimingThre
                                        CellSyncBurstTimingThreshold
                                                                                OPTIONAL,
                                        ProtocolExtensionContainer { { SyncDLCodeInfoItem-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                              OPTIONAL,
SyncDLCodeInfoItem-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SynchronisationReportCharacteristicsType ::= ENUMERATED {
    frameRelated,
    sFNperiodRelated,
    cycleLengthRelated,
    thresholdExceeding,
    frequencyAcquisitionCompleted,
SynchronisationReportType ::= ENUMERATED {
    initialPhase,
    steadyStatePhase,
    lateEntrantCell,
    frequencyAcquisition,
Semi-PersistentScheduling-CapabilityLCR ::= ENUMERATED {
    semi-Persistent-scheduling-Capable,
    semi-Persistent-scheduling-Non-Capable
-- ------
 \texttt{T1} ::= \texttt{ENUMERATED} \  \{ \texttt{v10}, \texttt{v20}, \texttt{v30}, \texttt{v40}, \texttt{v50}, \texttt{v60}, \texttt{v70}, \texttt{v80}, \texttt{v90}, \texttt{v100}, \texttt{v120}, \texttt{v140}, \texttt{v160}, \texttt{v200}, \texttt{v300}, \texttt{v400}, \ldots \} 
T321 ::= ENUMERATED {v100, v200, v400, v800, ...}
T-Cell ::= ENUMERATED {
    ν0,
    v1.
    v2,
    v3,
    v4,
    ν5,
    v6,
    v7,
    v8,
```

```
v9
T-RLFAILURE ::= INTEGER (0..255)
-- Unit seconds, Range Os .. 25.5s, Step 0.1s
T-PROTECT ::= ENUMERATED \{v40, v60, v80, v100, v120, v200, v400, ...\}
T-SYNC ::= ENUMERATED \{v40, v80, v120, v160, v200, v300, v400, v500, \ldots\}
TDD-AckNack-Power-Offset ::= INTEGER (-7..8,...)
-- Unit dB, Range -7dB .. +8dB, Step 1dB
TDD-ChannelisationCode ::= ENUMERATED {
    chCodeldiv1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4.
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
    chCode16div1,
    chCode16div2,
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6,
    chCode16div7.
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
    chCode16div15,
    chCode16div16,
    . . .
TDD-ChannelisationCodeLCR ::= SEQUENCE {
    tDD-ChannelisationCode
                                      TDD-ChannelisationCode,
    modulation
                                      Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD or 7.68Mcps TDD
    iE-Extensions
                                              ProtocolExtensionContainer { { TDD-ChannelisationCodeLCR-ExtIEs} }
                                                                                                                               OPTIONAL,
    . . .
```

```
TDD-ChannelisationCodeLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-ChannelisationCode768
                                      ::= ENUMERATED
    chCode1div1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4,
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
    chCode16div1,
    chCode16div2,
    chCode16div3.
    chCode16div4,
    chCode16div5,
    chCode16div6,
    chCode16div7,
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
    chCode16div15,
    chCode16div16,
    chCode32div1,
    chCode32div2,
    chCode32div3,
    chCode32div4,
    chCode32div5,
    chCode32div6,
    chCode32div7,
    chCode32div8.
    chCode32div9,
    chCode32div10,
    chCode32div11,
    chCode32div12,
    chCode32div13,
    chCode32div14,
    chCode32div15,
    chCode32div16,
    chCode32div17,
```

```
chCode32div18,
    chCode32div19.
    chCode32div20.
    chCode32div21,
    chCode32div22,
    chCode32div23,
    chCode32div24.
    chCode32div25.
    chCode32div26,
    chCode32div27.
    chCode32div28,
    chCode32div29,
    chCode32div30,
    chCode32div31,
    chCode32div32,
TDD-DL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem
TDD-DL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
                                            ProtocolExtensionContainer { { TDD-DL-Code-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL,
TDD-DL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-DL-Code-LCR-InformationItem
TDD-DL-Code-LCR-InformationItem ::= SEQUENCE {
   dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    tdd-DL-DPCH-TimeSlotFormat-LCR
                                            TDD-DL-DPCH-TimeSlotFormat-LCR,
                                            ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                                                  OPTIONAL,
TDD-DL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-768-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs768)) OF TDD-DL-Code-768-InformationItem
TDD-DL-Code-768-InformationItem ::= SEQUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768,
                                            ProtocolExtensionContainer { { TDD-DL-Code-768-InformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
```

```
TDD-DL-Code-768-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-DL-DPCH-TimeSlotFormat-LCR ::= CHOICE ·
                                OPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK
                                EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    -- For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, this IE denotes MBSFN S-CCPCH time slot format
QPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
-- For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, this IE denotes MBSFN S-CCPCH time slot format, INTEGER(0..11,...)
TDD-DPCHOffset ::= CHOICE {
    initialOffset
                        INTEGER (0..255),
    noinitialOffset
                        INTEGER (0..63)
TDD-PhysicalChannelOffset ::= INTEGER (0..63)
TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
TDD-TPC-UplinkStepSize-LCR ::= ENUMERATED
    step-size1,
    step-size2,
    step-size3,
TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors
                                SEOUENCE {
       gainFactor
                                    CHOICE {
           fdd
                                        SEOUENCE ·
                betaC
                                            BetaCD,
                betaD
                                            BetaCD,
                iE-Extensions
                                    ProtocolExtensionContainer { { GainFactorFDD-ExtIEs } }
                                                                                                 OPTIONAL,
           tdd
                                        BetaCD,
        refTFCNumber
                                    RefTFCNumber
                                                     OPTIONAL,
                                ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs } }
        iE-Extensions
                                                                                                                      OPTIONAL,
    computedGainFactors
                                    RefTFCNumber,
```

```
GainFactorFDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
SignalledGainFactors-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationItem
TDD-UL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
                                            ProtocolExtensionContainer { TDD-UL-Code-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                                         OPTIONAL,
TDD-UL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-UL-Code-LCR-InformationItem
TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
   dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    tdd-UL-DPCH-TimeSlotFormat-LCR
                                            TDD-UL-DPCH-TimeSlotFormat-LCR,
   iE-Extensions
                                            ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs} }
                                                                                                                                 OPTIONAL,
TDD-UL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-768-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-768-InformationItem
TDD-UL-Code-768-InformationItem ::= SEQUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768,
   iE-Extensions
                                            ProtocolExtensionContainer { { TDD-UL-Code-768-InformationItem-ExtIEs} }
                                                                                                                                 OPTIONAL,
TDD-UL-Code-768-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-UL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
                                OPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
                                EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK
    . . .
```

OPTIONAL,

```
OPSK-UL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..69,...)
EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16.
    v32,
    . . .
TFCI-Presence ::= ENUMERATED {
    present,
    not-present
TFCI-SignallingMode ::= SEQUENCE {
    tFCI-SignallingOption
                                TFCI-SignallingMode-TFCI-SignallingOption,
    not-Used-splitType
                                NULL
                                                    OPTIONAL,
    not-Used-lengthOfTFCI2
                                NULL
                                                    OPTIONAL,
                                ProtocolExtensionContainer { { TFCI-SignallingMode-ExtIEs} }
    iE-Extensions
TFCI-SignallingMode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCI-SignallingMode-TFCI-SignallingOption ::= ENUMERATED {
    normal,
    not-Used-split
TGD
                    ::= INTEGER (0 | 15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence
TGPRC
                    ::= INTEGER (0..511)
-- 0 = infinity
TGPSID
                    ::= INTEGER (1.. maxTGPS)
TGSN
                    ::= INTEGER (0..14)
TimeSlot ::= INTEGER (0..14)
TimeSlotDirection ::= ENUMERATED {
    ul,
    dl,
    . . .
```

1108

```
TimeSlot-InitiatedListLCR ::= SEQUENCE (SIZE (0..6)) OF TimeSlotLCR
TimeSlotLCR ::= INTEGER (0..6)
TimeslotLCR-Extension ::= ENUMERATED
    . . .
-- ts7 indicates the MBSFN Special Timeslot for 1.28Mcps TDD MBSFN Dedicated Carrier.
TimeSlotMeasurementValueListLCR::= SEQUENCE (SIZE (1..6)) OF TimeSlotMeasurementValueLCR
TimeSlotMeasurementValueLCR ::= SEQUENCE {
    timeSlotLCR
                                TimeSlotLCR,
    commonMeasurementValue
                                CommonMeasurementValue,
                                ProtocolExtensionContainer { {TimeSlotMeasurementValueListLCR-ExtIEs} } OPTIONAL,
    iE-Extensions
TimeSlotMeasurementValueListLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotStatus ::= ENUMERATED
    active,
    not-active,
TimingAdjustmentValue ::= CHOICE {
    initialPhase
                       INTEGER (0..1048575,...),
    steadyStatePhase
                       INTEGER (0..255,...)
TimingAdjustmentValueLCR ::= CHOICE {
    initialPhase
                       INTEGER (0..524287,...),
    steadyStatePhase INTEGER (0..127,...)
TimingAdvanceApplied ::= ENUMERATED {
    yes,
    no
SynchronisationIndicator ::= ENUMERATED {
    timingMaintainedSynchronisation,
    . . .
TnlQos ::= CHOICE {
    dsField
                            DsField.
```

```
genericTrafficCategory GenericTrafficCategory,
ToAWE ::= INTEGER (0..2559)
-- Unit ms
ToAWS ::= INTEGER (0..1279)
-- Unit ms
Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
    SEOUENCE {
        tGPSID
                        TGPSID,
        tGSN
                        TGSN,
        tGL1
                        GapLength,
        tGL2
                        GapLength OPTIONAL,
        tGD
                        TGD,
        tGPL1
                        GapDuration,
                                    GapDuration OPTIONAL,
        not-to-be-used-1
            -- This IE shall never be included in the SEQUENCE. If received it shall be ignored
        uL-DL-mode
                        UL-DL-mode,
        downlink-Compressed-Mode-Method
                                            Downlink-Compressed-Mode-Method
                                                                                 OPTIONAL,
            -- This IE shall be present if the UL/DL mode IE is set to "DL only" or "UL/DL"
        uplink-Compressed-Mode-Method
                                            Uplink-Compressed-Mode-Method
            -- This IE shall be present if the \it{UL/DL} mode IE is set to "UL only" or "UL/DL"
        dL-FrameType
                            DL-FrameType,
        delta-SIR1
                            DeltaSIR,
        delta-SIR-after1
                            DeltaSIR,
        delta-SIR2
                            DeltaSIR
                                        OPTIONAL,
        delta-SIR-after2
                            DeltaSIR
                                        OPTIONAL,
        iE-Extensions
                                ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
        . . .
Transmission-Gap-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransmissionGapPatternSequenceCodeInformation ::= ENUMERATED{
   code-change,
   nocode-change
```

```
(1..maxNrOfCellPortionsPerCell)) OF TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValue-
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOTE-HICHTransmissionCellPortionValue-Item ::= SEOUENCE{
    cellPortionID
                                            CellPortionID,
    transmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue.
                                            ProtocolExtensionContainer { { TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-
RGCHOrE-HICHTransmissionCellPortionValue-Item-ExtIEs} }
                                                            OPTIONAL,
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOTE-HICHTransmissionCellPortionValue-Item-ExtIEs NBAP-PROTOCOL-EXTENSION
::= {
TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue ::= INTEGER(0..100)
-- According to mapping in [22] and [23]
Transmitted-Carrier-Power-For-CellPortion-Value ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Transmitted-Carrier-Power-For-CellPortion-
Value-Item
Transmitted-Carrier-Power-For-CellPortion-Value-Item ::= SEOUENCE{
    cellPortionID
                                            CellPortionID,
    transmitted-Carrier-Power-Value
                                            Transmitted-Carrier-Power-Value,
                                            ProtocolExtensionContainer { { Transmitted-Carrier-Power-For-CellPortion-Value-Item-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Transmitted-Carrier-Power-For-CellPortion-Value-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- According to mapping in [22]/[23]
Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in [22]/[23]. Values 0 to 9 and 123 to 127 shall not be used.
Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)
TransmissionDiversityApplied ::= BOOLEAN
-- true: applied, false: not applied
TransmitDiversityIndicator ::= ENUMERATED {
    active,
    inactive
TFCS ::= SEQUENCE {
    tFCSvalues
                                CHOICE {
       no-Split-in-TFCI
                                    TFCS-TFCSList,
```

1110

TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValue ::= SEQUENCE (SIZE

```
not-Used-split-in-TFCI
       -- This choice shall never be made by the CRNC and the Node B shall consider the procedure as failed if it is received.
    iE-Extensions
                        ProtocolExtensionContainer { { TFCS-ExtIEs} }
                                                                            OPTIONAL,
TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCs)) OF
    SEQUENCE {
       CTFC
                            TFCS-CTFC,
       t.FC-Beta
                        TransportFormatCombination-Beta
                                                            OPTIONAL,
       -- The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD - or PCPCH channel].
       iE-Extensions
                            ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs} }
        . . .
TFCS-TFCSList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-CTFC ::= CHOICE {
    ctfc2bit
                                        INTEGER (0..3),
    ctfc4bit
                                        INTEGER (0..15),
    ctfc6bit
                                        INTEGER (0..63),
    ctfc8bit
                                        INTEGER (0..255),
    ctfc12bit
                                        INTEGER (0..4095),
    ctfc16bit
                                        INTEGER (0..65535),
    ctfcmaxbit
                                        INTEGER (0..maxCTFC)
Transport-Block-Size-Index ::= INTEGER(1..maxNrOfHS-DSCH-TBSs)
Transport-Block-Size-Index-for-Enhanced-PCH ::= INTEGER(1..32)
-- Index of the value range 1 to 32 of the MAC-ehs transport block size as specified in appendix A of [32]
Transport-Block-Size-List ::= SEQUENCE (SIZE (1..maxNrOfHS-DSCHTBSsE-PCH)) OF
    SEQUENCE {
       transport-Block-Size-Index-for-Enhanced-PCH
                                                            Transport-Block-Size-Index-for-Enhanced-PCH,
                                    ProtocolExtensionContainer { { Transport-Block-Size-List-ExtIEs} }
       iE-Extensions
                                                                                                                         OPTIONAL,
        . . .
Transport-Block-Size-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportBearerRequestIndicator ::= ENUMERATED {
    bearerRequested,
    bearerNotRequested,
```

```
TransportBearerNotRequestedIndicator ::= ENUMERATED {
    transport-bearer-shall-not-be-established,
    transport-bearer-may-not-be-established
TransportBearerNotSetupIndicator ::= ENUMERATED {
    transport-bearer-not-setup
TransportFormatSet ::= SEQUENCE {
    dynamicParts
                            TransportFormatSet-DynamicPartList,
    semi-staticPart
                            TransportFormatSet-Semi-staticPart,
    iE-Extensions
                            ProtocolExtensionContainer { { TransportFormatSet-ExtIEs} }
                                                                                                 OPTIONAL,
    . . .
TransportFormatSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
    SEOUENCE {
       nrOfTransportBlocks
                                    TransportFormatSet-NrOfTransportBlocks,
        transportBlockSize
                                    TransportFormatSet-TransportBlockSize
                                                                                OPTIONAL,
        -- This IE shall be present if the Number of Transport Blocks IE is set to a value greater than 0
                                    TransportFormatSet-ModeDP,
                                    ProtocolExtensionContainer { TransportFormatSet-DynamicPartList-ExtIEs} }
        iE-Extensions
                                                                                                                         OPTIONAL,
TransportFormatSet-DynamicPartList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
    transmissionTimeIntervalInformation
                                            TransmissionTimeIntervalInformation
                                                                                    OPTIONAL,
    -- This IE shall be present if the Transmission Time Interval IE in the Semi-static Transport Format Information IE is set to 'dynamic'
                                            ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
    iE-Extensions
TDD-TransportFormatSet-ModeDP-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-count)) OF
    SEQUENCE {
       transmissionTimeInterval
                                        TransportFormatSet-TransmissionTimeIntervalDynamic,
    iE-Extensions
                                        ProtocolExtensionContainer { { TransmissionTimeIntervalInformation-ExtIEs} }
                                                                                                                                OPTIONAL,
```

```
TransmissionTimeIntervalInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTimeInterval
                                        TransportFormatSet-TransmissionTimeIntervalSemiStatic,
    channelCoding
                                    TransportFormatSet-ChannelCodingType,
    codingRate
                                    TransportFormatSet-CodingRate
                                                                                 OPTIONAL,
    -- This IE shall be present if the Type of channel coding IE is set to 'convolutional' or 'turbo'
    rateMatchingAttribute
                                    TransportFormatSet-RateMatchingAttribute,
    cRC-Size
                                    TransportFormatSet-CRC-Size,
    mode
                                    TransportFormatSet-ModeSSP
    iE-Extensions
                                    ProtocolExtensionContainer { { TransportFormatSet-Semi-staticPart-ExtIEs} }
                                                                                                                          OPTIONAL,
TransportFormatSet-Semi-staticPart-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-ChannelCodingType ::= ENUMERATED {
    no-codingTDD,
    convolutional-coding,
    turbo-coding,
    . . .
TransportFormatSet-CodingRate ::= ENUMERATED {
    half,
    third,
TransportFormatSet-CRC-Size ::= ENUMERATED {
   v0,
    v8,
    v12,
    v16,
    v24,
TransportFormatSet-ModeDP ::= CHOICE {
                       TDD-TransportFormatSet-ModeDP,
    notApplicable
                                NULL,
TransportFormatSet-ModeSSP ::= CHOICE {
                    TransportFormatSet-SecondInterleavingMode,
    notApplicable
                                NULL,
```

```
TransportFormatSet-NrOfTransportBlocks ::= INTEGER (0..512)
TransportFormatSet-RateMatchingAttribute ::= INTEGER (1..maxRateMatching)
TransportFormatSet-SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeSlot-related.
TransportFormatSet-TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    . . .
TransportFormatSet-TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    dynamic,
    . . . ,
    msec-5
TransportFormatSet-TransportBlockSize ::= INTEGER (0..5000)
TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))
TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
TSN-Length ::= ENUMERATED {
    tsn-6bits,
    tsn-9bits
TUTRANGANSS ::= SEOUENCE {
    mS
                    INTEGER (0..16383),
    ls
                    INTEGER (0..4294967295)
TUTRANGANSSAccuracyClass ::= ENUMERATED {
    ganssAccuracy-class-A,
    ganssAccuracy-class-B,
    ganssAccuracy-class-C,
    . . .
```

```
TUTRANGANSSMeasurementThresholdInformation ::= SEQUENCE {
    tUTRANGANSSChangeLimit
                                        INTEGER (1..256)
                                                                                                                      OPTIONAL,
    predictedTUTRANGANSSDeviationLimit INTEGER (1..256)
                                                                                                                      OPTIONAL,
    ie-Extensions
                            ProtocolExtensionContainer { { TUTRANGANSSMeasurementThresholdInformation-ExtIEs } }
                                                                                                                      OPTIONAL,
TUTRANGANSSMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TUTRANGANSSMeasurementValueInformation ::= SEQUENCE {
    tUTRANGANSS
                                    TUTRANGANSS,
    tUTRANGANSSQuality
                                    INTEGER (0..255)
                                                                                                                      OPTIONAL,
    tUTRANGANSSDriftRate
                                    INTEGER (-50..50),
    tUTRANGANSSDriftRateOuality
                                    INTEGER (0..50)
                                                                                                                      OPTIONAL,
    ie-Extensions
                            ProtocolExtensionContainer { { TUTRANGANSSMeasurementValueInformation-ExtIEs } }
                                                                                                                      OPTIONAL,
TUTRANGANSSMeasurementValueInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-GANSS-Time-ID
                                     CRITICALITY ignore
                                                             EXTENSION GANSS-Time-ID
                                                                                          PRESENCE
                                                                                                                       optional },
    . . .
TUTRANGPS ::= SEQUENCE {
    ms-part
                INTEGER (0..16383),
    ls-part
                INTEGER (0..4294967295)
TUTRANGPSChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s
TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s
TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
TUTRANGPSMeasurementThresholdInformation ::= SEQUENCE
    tUTRANGPSChangeLimit
                                             TUTRANGPSChangeLimit
                                                                                      OPTIONAL,
                                             PredictedTUTRANGPSDeviationLimit
    predictedTUTRANGPSDeviationLimit
                                                                                      OPTIONAL,
```

```
ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL,
TUTRANGPSMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
       tUTRANGPS
                                      TUTRANGPS,
       tUTRANGPSQuality
                                      TUTRANGPSQuality
                                                                     OPTIONAL,
       tUTRANGPSDriftRate
                                      TUTRANGPSDriftRate,
       tUTRANGPSDriftRateQuality
                                      TUTRANGPSDriftRateQuality
                                                                     OPTIONAL,
                                      ProtocolExtensionContainer { {TUTRANGPSMeasurementValueInformationItem-ExtIEs} }
       iE-Extensions
                                                                                                                                 OPTIONAL.
       . . .
TUTRANGPSMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TUTRANGPSQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip
TxDiversityOnDLControlChannelsByMIMOUECapability ::= ENUMERATED {
    dL-Control-Channel-Tx-Diversity-for-MIMO-UE-with-non-diverse-P-CPICH-Capable,
    dL-Control-Channel-Tx-Diversity-for-MIMO-UE-with-non-diverse-P-CPICH-Not-Capable
TypeOfError ::= ENUMERATED {
   not-understood,
    missing,
  _____
-- -----
UARFCN ::= INTEGER (0..16383, ...)
-- corresponds to OMHz .. 3276.6MHz
UC-Id ::= SEQUENCE {
    rNC-ID
                       RNC-ID,
    c-ID
                       C-ID,
                          ProtocolExtensionContainer { {UC-Id-ExtIEs} } OPTIONAL,
    iE-Extensions
UC-Id-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                              CRITICALITY reject
    { ID id-Extended-RNC-ID
                                                     EXTENSION
                                                                Extended-RNC-ID PRESENCE
                                                                                           optional },
```

```
UDRE ::= ENUMERATED {
    udre-minusequal-one-m,
    udre-betweenoneandfour-m,
    udre-betweenfourandeight-m,
    udre-greaterequaleight-m
UE-Capability-Information ::= SEQUENCE {
    hSDSCH-Physical-Layer-Category
                                        INTEGER (1..64,...),
                                        ProtocolExtensionContainer { { UE-Capability-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
UE-Capability-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-LCRTDD-uplink-Physical-Channel-Capability
                                                             CRITICALITY ignore
                                                                                     EXTENSION LCRTDD-Uplink-Physical-Channel-Capability
        PRESENCE optional } |
    {ID id-number-Of-Supported-Carriers
                                                             CRITICALITY reject
                                                                                     EXTENSION Number-Of-Supported-Carriers
                PRESENCE optional } |
    {ID id-MultiCarrier-HSDSCH-Physical-Layer-Category
                                                             CRITICALITY ignore
                                                                                     EXTENSION LCRTDD-HSDSCH-Physical-Layer-Category
    PRESENCE optional } |
    {ID id-MIMO-SFMode-Supported-For-HSPDSCHDualStream
                                                                 CRITICALITY reject
                                                                                         EXTENSION MIMO-SFMode-For-HSPDSCHDualStream
                    PRESENCE optional }.
UE-SupportIndicatorExtension ::= BIT STRING (SIZE (32))
-- First bit: Different HS-SCCH In Consecutive TTIs Support Indicator
-- Second bit: HS-SCCH orders in HS-SCCH-less Operation Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
LCRTDD-HSDSCH-Physical-Layer-Category ::= INTEGER (1..64)
UE-DPCCH-burst1 ::= ENUMERATED {v1, v2, v5}
    -- Unit subframe
UE-DPCCH-burst2 ::= ENUMERATED {v1, v2, v5}
    -- Unit subframe
UE-DRX-Cycle ::= ENUMERATED {v4, v5, v8, v10, v16, v20}
    -- Unit subframe
UE-DRX-Grant-Monitoring ::= BOOLEAN
    -- true: applied, false: not applied
UE-DTX-Cycle1-2ms ::= ENUMERATED {v1, v4, v5, v8, v10, v16, v20}
    -- Unit subframe
UE-DTX-Cycle1-10ms ::= ENUMERATED {v1, v5, v10, v20}
    -- Unit subframe
UE-DTX-Cycle2-2ms ::= ENUMERATED {v4, v5, v8, v10, v16, v20, v32, v40, v64, v80, v128, v160}
    -- Unit subframe
```

```
UE-DTX-Cycle2-10ms ::= ENUMERATED {v5, v10, v20, v40, v80, v160}
    -- Unit subframe
UE-DTX-DRX-Offset ::= INTEGER (0..159)
    -- Unit subframe
UE-DTX-Long-Preamble ::= ENUMERATED {v2, v4, v15}
    -- Units of slots
UL-CapacityCredit ::= INTEGER (0..65535)
UL-Delta-T2TP ::= INTEGER (0..6,...)
UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
UL-DPDCH-Indicator-For-E-DCH-Operation ::= ENUMERATED {
    ul-DPDCH-present,
    ul-DPDCH-not-present
Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2,
    higher-layer-scheduling,
UL-Timeslot-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationItem
UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    tFCI-Presence
                                            TFCI-Presence,
    uL-Code-InformationList
                                            TDD-UL-Code-Information,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationItem-ExtIEs} }
                                                                                                                         OPTIONAL,
UL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeslotLCR-InformationItem
UL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
```

```
midambleShiftLCR
                                          MidambleShiftLCR,
    tFCI-Presence
                                          TFCI-Presence.
    uL-Code-InformationList
                                          TDD-UL-Code-LCR-Information.
    iE-Extensions
                                          ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs} }
                                                                                                                    OPTIONAL,
UL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
EXTENSION PLCCHinformation
                                                                                                                PRESENCE optional },
UL-Timeslot768-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot768-InformationItem
UL-Timeslot768-InformationItem ::= SEQUENCE {
    timeSlot
                                          TimeSlot,
    midambleShiftAndBurstType768
                                          MidambleShiftAndBurstType768,
    tFCI-Presence
                                          TFCI-Presence,
    uL-Code-InformationList
                                          TDD-UL-Code-768-Information,
                                          ProtocolExtensionContainer { { UL-Timeslot768-InformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                    OPTIONAL,
UL-Timeslot768-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCCH-SlotFormat ::= INTEGER (0..5,...)
UL-SIR ::= INTEGER (-82..173)
-- According to mapping in [16]
UL-FP-Mode ::= ENUMERATED {
   normal,
    silent,
UL-PhysCH-SF-Variation ::= ENUMERATED {
    sf-variation-supported,
    sf-variation-not-supported
UL-ScramblingCode ::= SEQUENCE {
    uL-ScramblingCodeNumber
                                   UL-ScramblingCodeNumber,
    uL-ScramblingCodeLength
                                  UL-ScramblingCodeLength,
   iE-Extensions
                                  ProtocolExtensionContainer { { UL-ScramblingCode-ExtIEs } }
                                                                                                                OPTIONAL,
UL-ScramblingCode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
UL-ScramblingCodeNumber ::= INTEGER (0..16777215)
UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
UL-Synchronisation-Parameters-LCR ::= SEQUENCE {
    uL-Synchronisation-StepSize
                                        UL-Synchronisation-StepSize,
    uL-Synchronisation-Frequency
                                        UL-Synchronisation-Frequency,
    iE-Extensions
                                        ProtocolExtensionContainer { { UL-Synchronisation-Parameters-LCR-ExtIEs } }
                                                                                                                         OPTIONAL,
    . . .
UL-Synchronisation-Parameters-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Synchronisation-StepSize ::= INTEGER (1..8)
UL-Synchronisation-Frequency ::= INTEGER (1..8)
UPPCHPositionLCR ::= INTEGER (0..127)
UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-TimeSlot-ISCP-InfoItem
UL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    iSCP
                                    UL-TimeslotISCP-Value,
                                    ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs} }
   iE-Extensions
                                                                                                                         OPTIONAL,
    . . .
UL-TimeSlot-ISCP-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeSlot-ISCP-LCR-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeSlot-ISCP-LCR-InfoItem
UL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
    timeSlotLCR
                                    TimeSlotLCR,
    iSCP
                                    UL-TimeslotISCP-Value,
   iE-Extensions
                                    ProtocolExtensionContainer { { UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs} }
                                                                                                                         OPTIONAL,
UL-TimeSlot-ISCP-LCR-InfoItem-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
UpPTSInterferenceValue ::= INTEGER (0..127,...)
Unidirectional-DCH-Indicator ::= ENUMERATED {
    downlink-DCH-only,
```

} |

} |

```
uplink-DCH-only
USCH-Information ::= SEOUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationItem
USCH-InformationItem ::= SEQUENCE {
   uSCH-ID
                                     USCH-ID.
   cCTrCH-ID
                                     CCTrCH-ID.
                                                      -- UL CCTrCH in which the USCH is mapped
   transportFormatSet
                                     TransportFormatSet, -- For USCH
   allocationRetentionPriority
                                     AllocationRetentionPriority,
   iE-Extensions
                                     ProtocolExtensionContainer { { USCH-InformationItem-ExtIEs} }
                                                                                                      OPTIONAL,
   . . .
USCH-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-bindingID
                                     CRITICALITY ignore
                                                         EXTENSION
                                                                   BindingID
                                                                                                  PRESENCE
                                                                                                            optional
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                     CRITICALITY ignore
                                                                    TransportLayerAddress
                                                                                                            optional
                                                          EXTENSION
                                                                                                  PRESENCE
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-TnlOos
                                     CRITICALITY ignore
                                                                   TnlQos PRESENCE optional
                                                         EXTENSION
   . . .
USCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationResponseItem
USCH-InformationResponseItem ::= SEQUENCE {
   uSCH-ID
                                        USCH-ID,
   bindingID
                                        BindingID
                                                             OPTIONAL,
   transportLayerAddress
                                        TransportLayerAddress OPTIONAL,
   iE-Extensions
                                        OPTIONAL,
   . . .
USCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotISCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]
UL-TimeslotISCP-Value-IncrDecrThres ::= INTEGER (0..126)
USCH-ID ::= INTEGER (0..255)
-- -----
  _____
  _____
-- ------
-- -----
```

```
-- Y
-- Z
-- END
```

### 9.3.5 Common Definitions

```
__ *********************
-- Common definitions
__ *********************
NBAP-CommonDataTypes {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-CommonDataTypes (3) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
__ *********************
-- Extension constants
__ *******************************
maxPrivateIEs
                        INTEGER ::= 65535
maxProtocolExtensions
                      INTEGER ::= 65535
maxProtocolIEs
                        INTEGER ::= 65535
__ **********************
-- Common Data Types
__ *********************
            ::= ENUMERATED { reject, ignore, notify }
Criticality
MessageDiscriminator
                ::= ENUMERATED { common, dedicated }
            ::= ENUMERATED { optional, conditional, mandatory }
Presence
PrivateIE-ID ::= CHOICE {
  local
               INTEGER (0..maxPrivateIEs),
   qlobal
                 OBJECT IDENTIFIER
```

```
ProcedureCode ::= INTEGER (0..255)
ProcedureID
             ::= SEQUENCE {
   procedureCode
                           ProcedureCode,
   ddMode
                           ENUMERATED { tdd, fdd, common, ... }
                ::= INTEGER (0..maxProtocolIEs)
ProtocolIE-ID
TransactionID
                ::= CHOICE {
   shortTransActionId
                          INTEGER (0..127),
   longTransActionId
                          INTEGER (0..32767)
TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessfull-outcome, outcome }
END
```

#### 9.3.6 Constant Definitions

```
-- Constant definitions
__ *******************
NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
IMPORTS
   ProcedureCode,
   ProtocolIE-ID
FROM NBAP-CommonDataTypes;
    *************
-- Elementary Procedures
__ *******************
                                          ProcedureCode ::= 0
id-audit
id-auditRequired
                                          ProcedureCode ::= 1
id-blockResource
                                          ProcedureCode ::= 2
id-cellDeletion
                                          ProcedureCode ::= 3
id-cellReconfiguration
                                          ProcedureCode ::= 4
id-cellSetup
                                          ProcedureCode ::= 5
```

```
ProcedureCode ::= 45
id-cellSynchronisationInitiation
id-cellSynchronisationReconfiguration
                                                       ProcedureCode ··= 46
id-cellSynchronisationReporting
                                                       ProcedureCode ::= 47
id-cellSynchronisationTermination
                                                       ProcedureCode ::= 48
id-cellSynchronisationFailure
                                                       ProcedureCode ::= 49
id-commonMeasurementFailure
                                                       ProcedureCode ::= 6
id-commonMeasurementInitiation
                                                       ProcedureCode ::= 7
                                                       ProcedureCode ::= 8
id-commonMeasurementReport
id-commonMeasurementTermination
                                                       ProcedureCode ::= 9
id-commonTransportChannelDelete
                                                       ProcedureCode ::= 10
id-commonTransportChannelReconfigure
                                                       ProcedureCode ::= 11
id-commonTransportChannelSetup
                                                       ProcedureCode ::= 12
id-compressedModeCommand
                                                       ProcedureCode ::= 14
id-dedicatedMeasurementFailure
                                                       ProcedureCode ::= 16
id-dedicatedMeasurementInitiation
                                                       ProcedureCode ::= 17
id-dedicatedMeasurementReport
                                                       ProcedureCode ··= 18
id-dedicatedMeasurementTermination
                                                       ProcedureCode ::= 19
id-downlinkPowerControl
                                                       ProcedureCode ::= 20
id-downlinkPowerTimeslotControl
                                                       ProcedureCode ::= 38
id-errorIndicationForCommon
                                                       ProcedureCode ::= 35
id-errorIndicationForDedicated
                                                       ProcedureCode ::= 21
id-informationExchangeFailure
                                                       ProcedureCode ::= 40
id-informationExchangeInitiation
                                                       ProcedureCode ::= 41
id-informationExchangeTermination
                                                       ProcedureCode ::= 42
id-informationReporting
                                                       ProcedureCode ::= 43
id-BearerRearrangement
                                                       ProcedureCode ::= 50
id-mBMSNotificationUpdate
                                                       ProcedureCode ::= 53
id-physicalSharedChannelReconfiguration
                                                       ProcedureCode ::= 37
id-privateMessageForCommon
                                                       ProcedureCode ::= 36
id-privateMessageForDedicated
                                                       ProcedureCode ::= 22
id-radioLinkAddition
                                                       ProcedureCode ::= 23
id-radioLinkDeletion
                                                       ProcedureCode ::= 24
id-radioLinkFailure
                                                       ProcedureCode ::= 25
id-radioLinkPreemption
                                                       ProcedureCode ::= 39
id-radioLinkRestoration
                                                       ProcedureCode ::= 26
id-radioLinkSetup
                                                       ProcedureCode ::= 27
id-reset
                                                       ProcedureCode ::= 13
id-resourceStatusIndication
                                                       ProcedureCode ::= 28
                                                       ProcedureCode ::= 44
id-cellSynchronisationAdjustment
id-synchronisedRadioLinkReconfigurationCancellation
                                                       ProcedureCode ::= 29
id-synchronisedRadioLinkReconfigurationCommit
                                                       ProcedureCode ::= 30
id-synchronisedRadioLinkReconfigurationPreparation
                                                       ProcedureCode ::= 31
id-systemInformationUpdate
                                                       ProcedureCode ::= 32
id-unblockResource
                                                       ProcedureCode ::= 33
id-unSvnchronisedRadioLinkReconfiguration
                                                       ProcedureCode ::= 34
id-radioLinkActivation
                                                       ProcedureCode ::= 51
id-radioLinkParameterUpdate
                                                       ProcedureCode ::= 52
id-uEStatusUpdate
                                                       ProcedureCode ::= 54
__ *********************
-- Lists
__ *********************
```

```
maxNrOfCodes
                            INTEGER ::= 10
maxNrOfDLTSs
                            INTEGER ::= 15
maxNrOfDLTSLCRs
                            INTEGER ::= 6
maxNrOfErrors
                            INTEGER ::= 256
                            INTEGER ::= 32
maxNrOfTFs
maxNrOfTFCs
                            INTEGER ::= 1024
maxNrOfRLs
                            INTEGER ::= 16
maxNrOfRLs-1
                            INTEGER ::= 15 -- maxNrOfRLs - 1
                            INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfRLs-2
maxNrOfRLSets
                            INTEGER ::= maxNrOfRLs
maxNrOfDPCHs
                            INTEGER ::= 240
maxNrOfDPCHsPerRL-1
                            INTEGER ::= 239 -- maxNrofCCTrCH*maxNrOfULTSs-1
maxNrOfDPCHLCRs
                            INTEGER ::= 240
                            INTEGER ::= 95 -- maxNrofCCTrCH*maxNrOfULTSLCRs-1
maxNrOfDPCHsLCRPerRL-1
maxNrOfDPCHs768
                            INTEGER ::= 480
                            INTEGER ::= 479
maxNrOfDPCHs768PerRL-1
maxNrOfSCCPCHs
                            INTEGER ::= 8
maxNrOfSCCPCHsinExt
                            INTEGER ::= 232
                            INTEGER ::= 480
maxNrOfSCCPCHs768
maxNrOfDCHs
                            INTEGER ::= 128
                            INTEGER ::= 32
maxNrOfDSCHs
                            INTEGER ::= 8
maxNrOfFACHs
                            INTEGER ::= 16
maxNrOfCCTrCHs
maxNrOfPDSCHs
                            INTEGER ::= 256
maxNrOfHSPDSCHs
                            INTEGER ::= 16
                            INTEGER ::= 32
maxNrOfHSPDSCHs768
maxNrOfPUSCHs
                            INTEGER ::= 256
                            INTEGER ::= 255
maxNrOfPUSCHs-1
                            INTEGER ::= 256
maxNrOfPDSCHSets
maxNrOfPRACHLCRs
                            INTEGER ::= 8
maxNrOfPUSCHSets
                            INTEGER ::= 256
maxNrOfSCCPCHLCRs
                            INTEGER ::= 8
                            INTEGER ::= 88
maxNrOfSCCPCHsLCRinExt
maxNrOfULTSs
                            INTEGER ::= 15
maxNrOfULTSLCRs
                            INTEGER ::= 6
maxNrOfUSCHs
                            INTEGER ::= 32
                            INTEGER ::= 8
maxNrOfSlotFormatsPRACH
maxCellinNodeB
                            INTEGER ::= 256
maxCCPinNodeB
                            INTEGER ::= 256
                            INTEGER ::= 16777215
maxCTFC
maxLocalCellinNodeB
                            INTEGER ::= maxCellinNodeB
maxFPACHCell
                            INTEGER ::= 8
                            INTEGER ::= maxPRACHCell
maxRACHCell
maxPLCCHCell
                            INTEGER ::= 16
maxPRACHCell
                            INTEGER ::= 16
maxSCCPCHCell
                            INTEGER ::= 32
maxSCCPCHCellinExt
                            INTEGER ::= 208 -- maxNrOfSCCPCHs + maxNrOfSCCPCHsinExt - maxSCCPCHCell
maxSCCPCHCellinExtLCR
                            INTEGER ::= 64 -- maxNrOfSCCPCHLCRs + maxNrOfSCCPCHsLCRinExt - maxSCCPCHCell
                            INTEGER ::= 480
maxSCCPCHCell768
maxSCPICHCell
                            INTEGER ::= 32
maxTTI-count
                            INTEGER ::= 4
maxIBSEG
                            INTEGER ::= 16
maxIB
                            INTEGER ::= 64
```

```
INTEGER ::= 256 -- maxNrOfFACHs * maxSCCPCHCell
maxFACHCell
maxRateMatching
                            INTEGER ::= 256
maxHS-PDSCHCodeNrComp-1
                            INTEGER ::= 15
maxHS-SCCHCodeNrComp-1
                            INTEGER ::= 127
maxNrOfCellSyncBursts
                            INTEGER ::= 10
maxNrOfReceptsPerSyncFrame
                           INTEGER ::= 16
maxNrOfMeasNCell
                            INTEGER ::= 96
maxNrOfMeasNCell-1
                            INTEGER ::= 95
                                            -- maxNrOfMeasNCell - 1
maxNrOfSF
                            INTEGER · · = 8
maxTGPS
                            INTEGER ::= 6
maxCommunicationContext
                            INTEGER ::= 1048575
                            INTEGER ::= 256
maxNrOfLevels
                            INTEGER ::= 16
maxNoSat.
maxNoGPSItems
                            INTEGER ::= 8
maxNrOfHSSCCHs
                            INTEGER ::= 32
maxNrOfHSSICHs
                            INTEGER ::= 4
maxNrOfHSSICHs-1
                            INTEGER ::= 3
maxNrOfSyncFramesLCR
                            INTEGER ::= 512
maxNrOfReceptionsperSyncFrameLCR
                                    INTEGER ::= 8
maxNrOfSvncDLCodesLCR
                            INTEGER ::= 32
maxNrOfHSSCCHCodes
                                INTEGER ::= 4
maxNrOfMACdFlows
                                INTEGER ::= 8
maxNrOfMACdFlows-1
                                INTEGER ::= 7
                                                -- maxNrOfMACdFlows - 1
maxNrOfMACdPDUIndexes
                                INTEGER ::= 8
                                INTEGER ::= 7
                                                -- maxNoOfMACdPDUIndexes - 1
maxNrOfMACdPDUIndexes-1
maxNrOfMACdPDUSize
                                INTEGER ::= 32
maxNrOfNIs
                                INTEGER ::= 256
                                INTEGER ::= 8
maxNrOfPriorityQueues
maxNrOfPrioritvOueues-1
                                INTEGER ::= 7
                                                -- maxNoOfPrioritvOueues - 1
maxNrOfHAROProcesses
                                INTEGER ::= 8
maxNrOfContextsOnUeList
                                INTEGER ::= 16
                                INTEGER ::= 64
maxNrOfCellPortionsPerCell
maxNrOfCellPortionsPerCell-1
                                INTEGER ::= 63
maxNrOfPriorityClasses
                                INTEGER ::= 16
maxNrOfSatAlmanac-maxNoSat
                                INTEGER ::= 16
                                                -- maxNrofSatAlmanac - maxNoSat
maxNrOfE-AGCHs
                                INTEGER ::= 32
                                INTEGER ::= 8
maxNrOfEDCHMACdFlows
                                INTEGER ::= 7
maxNrOfEDCHMACdFlows-1
maxNrOfE-RGCHs-E-HICHs
                                INTEGER ::= 32
maxNrOfEDCH-HARQ-PO-QUANTSTEPs INTEGER ::= 6
maxNrOfEDCHHAROProcesses2msEDCH INTEGER ::= 8
                                INTEGER ::= 8
maxNrOfEDPCCH-PO-QUANTSTEPs
maxNrOfBits-MACe-PDU-non-scheduled INTEGER ::= 19982
                                INTEGER ::= 8
maxNrOfRefETFCIs
maxNrOfRefETFCI-PO-QUANTSTEPs
                                INTEGER ::= 29
maxNrofSigSeqRGHI-1
                                INTEGER ::= 39
maxNoOfLogicalChannels
                                INTEGER ::= 16 -- only maximum 15 can be used
maxNrOfCombEDPDCH
                                INTEGER ::= 12
maxE-RUCCHCell
                                INTEGER ::= 16
maxNrOfEAGCHCodes
                                INTEGER ::= 4
maxNrOfRefBetas
                                INTEGER ::= 8
maxNrOfE-PUCHSlots
                                INTEGER ::= 13
                                INTEGER ::= 32
maxNrOfEAGCHs
maxNrOfHS-DSCH-TBSs-HS-SCCHless INTEGER ::= 4
```

```
maxNrOfHS-DSCH-TBSs
                               INTEGER ::= 90
maxNrOfEHICHCodes
                               INTEGER ::= 4
maxNrOfE-PUCHSlotsLCR
                               INTEGER ::= 5
maxNrOfEPUCHcodes
                               INTEGER ::= 16
maxNrOfEHICHs
                               INTEGER ::= 32
maxNrOfCommonMACFlows
                               INTEGER ::= 8
maxNrOfCommonMACFlows-1
                               INTEGER ::= 7
maxNrOfPagingMACFlow
                               INTEGER ::= 4
maxNrOfPagingMACFlow-1
                               INTEGER ::= 3
maxNrOfcommonMACOueues
                               INTEGER ::= 8
maxNrOfpagingMACQueues
                               INTEGER ::= 8
maxNrOfHS-DSCHTBSsE-PCH
                               INTEGER ::= 2
maxGANSSSat.
                               INTEGER ::= 64
maxNoGANSS
                               INTEGER ::= 8
maxSqnType
                               INTEGER ::= 8
maxFrequencyinCell
                               INTEGER ::= 12
maxFrequencyinCell-1
                               INTEGER ::= 11
maxHSDPAFrequency
                               INTEGER ::= 8
                               INTEGER ::= 7
maxHSDPAFrequency-1
maxNrOfHSSCCHsinExt
                               INTEGER ::= 224
maxGANSSSatAlmanac
                               INTEGER ::= 36
maxGANSSClockMod
                               INTEGER ::= 4
maxNrOfEDCHRLs
                               INTEGER ::= 4
maxERNTItoRelease
                               INTEGER ::= 256
maxNrOfCommonEDCH
                               INTEGER ::= 32
maxNrOfCommonMACFlowsLCR
                               INTEGER ::= 256
maxNrOfCommonMACFlowsLCR-1
                               INTEGER ::= 255
maxNrOfHSSCCHsLCR
                               INTEGER ::= 256
                               INTEGER ::= 256
maxNrOfEDCHMACdFlowsLCR
                               INTEGER ::= 255
maxNrOfEDCHMACdFlowsLCR-1
                               INTEGER ::= 256
maxNrOfEAGCHsLCR
maxNrOfEHICHsLCR
                               INTEGER ::= 256
maxnrofERUCCHsLCR
                               INTEGER ::= 32
maxNrOfHSDSCH-1
                               INTEGER ::= 32
                               INTEGER ::= 33
maxNrOfHSDSCH
                               INTEGER ::= 7
maxGANSS-1
maxNoOfTBSs-Mapping-HS-DSCH-SPS
                                   INTEGER ::= 4
maxNoOfTBSs-Mapping-HS-DSCH-SPS-1
                                   INTEGER ::= 3
maxNoOfHS-DSCH-TBSsLCR
                                   INTEGER ::= 64
maxNoOfRepetition-Period-LCR
                                   INTEGER ::= 4
maxNoOfRepetitionPeriod-SPS-LCR-1
                                   INTEGER ::= 3
maxNoOf-HS-SICH-SPS
                                   INTEGER ::= 4
maxNoOf-HS-SICH-SPS-1
                                   INTEGER ::= 3
maxNoOfNon-HS-SCCH-Assosiated-HS-SICH INTEGER ::= 4
maxNoOfNon-HS-SCCH-Assosiated-HS-SICH-Ext INTEGER ::= 44
maxMBMSServiceSelect
                               INTEGER ::= 256
maxNoOfCommonH-RNTI
                               INTEGER ::= 256
maxNrOfCommonMACFlowsLCRExt
                               INTEGER ::= 248
-- maxNrOfCommonMACFlowsLCR-maxNrOfCommonMACFlows
maxofERNTI
                               INTEGER ::= 256
      -- IEs
```

id-AICH-Information ProtocolIE-ID ::= 0 id-ATCH-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 1 id-BCH-Information ProtocolIE-ID ::= 7 id-BCH-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 8 id-BCCH-ModificationTime ProtocolIE-ID ::= 9 id-BlockingPriorityIndicator ProtocolIE-ID  $\cdot \cdot = 10$ ProtocolIE-ID ::= 13 id-Cause id-CCP-InformationItem-AuditRsp ProtocolIE-ID ::= 14 id-CCP-InformationList-AuditRsp ProtocolIE-ID ::= 15 id-CCP-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 16 id-Cell-InformationItem-AuditRsp ProtocolIE-ID ::= 17 id-Cell-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 18 id-Cell-InformationList-AuditRsp ProtocolIE-ID ::= 19 id-CellParameterID ProtocolIE-ID ::= 23 id-CFN ProtocolIE-ID ::= 24 id-C-ID ProtocolIE-ID ::= 25 id-CommonMeasurementAccuracy ProtocolIE-ID ::= 39 id-CommonMeasurementObjectType-CM-Rprt ProtocolTE-TD ::= 31 id-CommonMeasurementObjectType-CM-Rqst ProtocolIE-ID ::= 32 id-CommonMeasurementObjectType-CM-Rsp ProtocolIE-ID ::= 33 id-CommonMeasurementTvpe ProtocolIE-ID ::= 34 id-CommonPhysicalChannelID ProtocolIE-ID ::= 35 id-CommonPhysicalChannelType-CTCH-SetupRqstFDD ProtocolIE-ID ::= 36 id-CommonPhysicalChannelType-CTCH-SetupRgstTDD ProtocolIE-ID ::= 37 id-CommunicationControlPortID ProtocolIE-ID ::= 40 id-ConfigurationGenerationID ProtocolIE-ID ::= 43 id-CRNC-CommunicationContextID ProtocolIE-ID ::= 44 id-CriticalityDiagnostics ProtocolIE-ID ::= 45 id-DCHs-to-Add-FDD ProtocolIE-ID ::= 48 id-DCH-AddList-RL-ReconfPrepTDD ProtocolIE-ID ::= 49 id-DCHs-to-Add-TDD ProtocolIE-ID ::= 50 id-DCH-DeleteList-RL-ReconfPrepFDD ProtocolIE-ID ::= 52 id-DCH-DeleteList-RL-ReconfPrepTDD ProtocolIE-ID ::= 53 id-DCH-DeleteList-RL-ReconfRqstFDD ProtocolIE-ID ::= 54 id-DCH-DeleteList-RL-ReconfRgstTDD ProtocolIE-ID ::= 55 id-DCH-FDD-Information ProtocolIE-ID ::= 56 id-DCH-TDD-Information ProtocolIE-ID ::= 57 id-DCH-InformationResponse ProtocolIE-ID ::= 59 ProtocolIE-ID ::= 62 id-FDD-DCHs-to-Modify id-TDD-DCHs-to-Modify ProtocolIE-ID ::= 63 id-DCH-ModifyList-RL-ReconfRqstTDD ProtocolTE-ID ::= 65 id-DCH-RearrangeList-Bearer-RearrangeInd ProtocolIE-ID ::= 135 id-DedicatedMeasurementObjectTvpe-DM-Rprt ProtocolIE-ID ::= 67 id-DedicatedMeasurementObjectType-DM-Rgst ProtocolIE-ID ::= 68 id-DedicatedMeasurementObjectType-DM-Rsp ProtocolIE-ID ::= 69 id-DedicatedMeasurementType ProtocolIE-ID ::= 70 id-DL-CCTrCH-InformationItem-RL-SetupRgstTDD ProtocolIE-ID ::= 72 id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD ProtocolIE-ID ::= 73 id-DL-CCTrCH-InformationList-RL-SetupRgstTDD ProtocolIE-ID ::= 76 id-DL-DPCH-InformationItem-RL-AdditionRqstTDD ProtocolIE-ID ::= 77 id-DL-DPCH-InformationList-RL-SetupRqstTDD ProtocolIE-ID ::= 79

id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 21
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-Unused-ProtocolIE-ID-87	ProtocolIE-ID ::= 87
id-Unused-ProtocolIE-ID-89	ProtocolIE-ID ::= 89
id-Unused-ProtocolIE-ID-91	ProtocolIE-ID ::= 91
id-Unused-ProtocolIE-ID-93	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-Unused-ProtocolIE-ID-106	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-Unused-ProtocolIE-ID-108	ProtocolIE-ID ::= 108
id-Unused-ProtocolIE-ID-112	ProtocolIE-ID ::= 112
id-DSCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 136
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156

id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222

id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRgstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 265 ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
	ProtocolIE-ID ::= 266 ProtocolIE-ID ::= 138
<pre>id-SignallingBearerRequestIndicator id-ShutdownTimer</pre>	ProtocolIE-ID ::= 136 ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114 ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276
id-TargetCommunicationControlPortID	ProtocolIE-ID ::= 139
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297

id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
id-USCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 141
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-Not-Used-320	ProtocolIE-ID ::= 320
id-Not-Used-322	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailure	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-Not-Used-330	ProtocolIE-ID ::= 330
id-Not-Used-332	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-Not-Used-336	ProtocolIE-ID ::= 336
id-Not-Used-342	ProtocolIE-ID ::= 342
id-Not-Used-343	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPC-Mode	ProtocolIE-ID ::= 450
id-DPCHConstant	ProtocolIE-ID ::= 359
id-Unused-ProtocolIE-ID-94	ProtocolIE-ID ::= 94
id-Unused-ProtocolIE-ID-110	ProtocolIE-ID ::= 110
id-Unused-ProtocolIE-ID-111	ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-Not-Used-376	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384

id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-Unused-ProtocolIE-ID-443	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocolIE-ID ::= 416
id-Unused-ProtocolIE-ID-417	ProtocolIE-ID ::= 417
id-Unused-ProtocolIE-ID-418	ProtocolIE-ID ::= 418
id-Unused-ProtocolIE-ID-419	ProtocolIE-ID ::= 419
id-Unused-ProtocolIE-ID-142	ProtocolIE-ID ::= 142
id-TimingAdvanceApplied	ProtocolIE-ID ::= 287
id-CFNReportingIndicator	ProtocolIE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421 ProtocolIE-ID ::= 494
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD	
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
<pre>id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD</pre>	ProtocolIE-ID ::= 422 ProtocolIE-ID ::= 423
· · · · · · · · · · · · · · · · · · ·	ProtocoliE-ID ::= 423 ProtocolIE-ID ::= 424
<pre>id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD</pre>	ProtocoliE-ID ::= 424 ProtocolIE-ID ::= 425
· · · · · · · · · · · · · · · · · · ·	ProtocoliE-ID ::= 425 ProtocolIE-ID ::= 426
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427 ProtocolIE-ID ::= 428
<pre>id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD id-CellSyncInfo-CellSyncReprtTDD</pre>	ProtocoliE-ID ::= 428 ProtocolIE-ID ::= 429
id-CSBTransmissionID	ProtocolIE-ID ::= 429 ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 430 ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 431
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 432 ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod	ProtocoliE-ID ::= 433 ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 434 ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 437 ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 438 ProtocolIE-ID ::= 439
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id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435
id-ReferenceSFNoffset	ProtocolIE-ID ::= 436
id-InformationExchangeID	ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445
id-InformationType	ProtocolIE-ID ::= 446
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-DwPCH-LCR-Information	ProtocolIE-ID ::= 78
id-DwPCH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd	ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 174
id-FPACH-LCR-Information	ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRgstTDD	ProtocolIE-ID ::= 312
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 459
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 461
id-RL-InformationResponse-LCR-RL-SetupRspTDD	ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 465
id-TimeSlot	ProtocolIE-ID ::= 495
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 467
id-TimeslotiSCP-LCR-InfoList-RL-SetupRqstTDD	ProtocoliE-ID ::= 467
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id-TimeSlotLCR-CM-Rqst	ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 470
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 477
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList	ProtocolIE-ID ::= 483
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 485
id-UL-SIRTarget	ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 487

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id-Unused-ProtocolIE-ID-26	ProtocolIE-ID ::= 26
id-Unused-ProtocolIE-ID-27	ProtocolIE-ID ::= 27
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-Power-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 498
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 499
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 500
id-Power-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 501
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 502
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd	ProtocolIE-ID ::= 503
id-Power-Local-Cell-Group-ID	ProtocolIE-ID ::= 504
id-PUSCH-Info-DM-Rqst	ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp	ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt	ProtocolIE-ID ::= 507
id-InitDL-Power	ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod	ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification	ProtocolIE-ID ::= 512
id-SFNSFNMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFNSFNMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
${\tt id} ext{-TUTRANGPSMeasurementThresholdInformation}$	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD	ProtocolIE-ID ::= 51
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 28
id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 29
id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 30
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 517
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 518
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD	ProtocolIE-ID ::= 519
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 41
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 42
id-HS-PDSCH-HS-SCCH-E-AGCH-E-RGCH-E-HICH-MaxPower-PSCH-ReconfRqst	ProtocolIE-ID ::= 522
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst	ProtocolIE-ID ::= 523
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 524
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 525
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 526
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 527
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 528
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 529
id-bindingID	ProtocolIE-ID ::= 102
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= 103
id-transportlayeraddress	ProtocolIE-ID ::= 104
id-DelayedActivation	ProtocolIE-ID ::= 231
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 232
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 233
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 234
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 235
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 58
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id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 543
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 544
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 545
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 546
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 547
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD	ProtocolIE-ID ::= 548
id-SyncDLCodeIdThreInfoLCR	ProtocolIE-ID ::= 549
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 550
id-DwPCH-Power	ProtocolIE-ID ::= 551
	ProtocolIE-ID ::= 551
id-AccumulatedClockupdate-CellSyncReprtTDD	
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 521
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 530
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 531
id-HSDSCH-Information-to-Modify	ProtocolIE-ID ::= 534
id-HSDSCH-RNTI	ProtocolIE-ID ::= 535
id-HSDSCH-TDD-Information	ProtocolIE-ID ::= 536
id-HSDSCH-TDD-Information-Response	ProtocolIE-ID ::= 537
id-HSPDSCH-RL-ID	ProtocolIE-ID ::= 541
id-PrimCCPCH-RSCP-DL-PC-RqstTDD	ProtocolIE-ID ::= 542
id-Unused-ProtocolIE-ID-64	ProtocolIE-ID ::= 64
id-PDSCH-RL-ID	ProtocolIE-ID ::= 66
id-HSDSCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 553
id-UL-Synchronisation-Parameters-LCR	ProtocolIE-ID ::= 554
id-HSDSCH-FDD-Update-Information	ProtocolIE-ID ::= 555
id-HSDSCH-TDD-Update-Information	ProtocolIE-ID ::= 556
<del>-</del>	ProtocolIE-ID ::= 558
id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD	
id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 559
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD	ProtocolIE-ID ::= 560
id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 561
id-TDD-TPC-DownlinkStepSize-RL-AdditionRqstTDD	ProtocolIE-ID ::= 562
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 563
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 564
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 565
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD	ProtocolIE-ID ::= 566
id-CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 567
id-CCTrCH-Minimum-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 568
id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 569
id-CCTrCH-Minimum-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 570
id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD	ProtocolIE-ID ::= 571
id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD	ProtocolIE-ID ::= 572
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 573
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 574
id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 575
id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 576
id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 576 ProtocolIE-ID ::= 577
<del>_</del>	
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD	ProtocolIE-ID ::= 578
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD	ProtocolIE-ID ::= 579
id-Initial-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 580
id-Maximum-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 581
id-Minimum-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 582
id-HS-DSCHProvidedBitRateValueInformation	ProtocolIE-ID ::= 583
id-HS-DSCHRequiredPowerValueInformation	ProtocolIE-ID ::= 585
id-HS-DSCHRequiredPowerValue	ProtocolIE-ID ::= 586
id-TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmission	ProtocolIE-ID ::= 587

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id-HS-SICH-Reception-Quality
                                                                                                                                                     ProtocolIE-ID ::= 588
id-HS-SICH-Reception-Quality-Measurement-Value
                                                                                                                                                     ProtocolIE-ID ::= 589
id-HSSICH-Info-DM-Rort
                                                                                                                                                     ProtocolIE-ID ::= 590
id-HSSICH-Info-DM-Rast
                                                                                                                                                     ProtocolIE-ID ::= 591
id-HSSICH-Info-DM-Rsp
                                                                                                                                                     ProtocolIE-ID ::= 592
id-Best-Cell-Portions-Value
                                                                                                                                                     ProtocolIE-ID ::= 593
id-Primary-CPICH-Usage-for-Channel-Estimation
                                                                                                                                                     ProtocolIE-ID ::= 594
id-Secondary-CPICH-Information-Change
                                                                                                                                                     ProtocolIE-ID ::= 595
id-NumberOfReportedCellPortions
                                                                                                                                                     ProtocolTE-ID ::= 596
id-CellPortion-InformationItem-Cell-SetupRgstFDD
                                                                                                                                                     ProtocolIE-ID ::= 597
id-CellPortion-InformationList-Cell-SetupRqstFDD
                                                                                                                                                     ProtocolIE-ID ::= 598
id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD
                                                                                                                                                     ProtocolIE-ID ::= 599
id-Secondary-CPICH-Information
                                                                                                                                                     ProtocolIE-ID ::= 600
id-Received-total-wide-band-power-For-CellPortion
                                                                                                                                                     ProtocolIE-ID ::= 601
id-Unidirectional-DCH-Indicator
                                                                                                                                                     ProtocolIE-ID ::= 602
id-TimingAdiustmentValueLCR
                                                                                                                                                     ProtocolIE-ID ··= 603
id-multipleRL-dl-DPCH-InformationList
                                                                                                                                                     ProtocolIE-ID ::= 604
id-multipleRL-dl-DPCH-InformationModifyList
                                                                                                                                                     ProtocolIE-ID ::= 605
id-multipleRL-ul-DPCH-InformationList
                                                                                                                                                     ProtocolIE-ID ::= 606
id-multipleRL-ul-DPCH-InformationModifyList
                                                                                                                                                     ProtocolIE-ID ::= 607
id-RI-ID
                                                                                                                                                     ProtocolTE-ID ::= 608
id-SAT-Info-Almanac-ExtItem
                                                                                                                                                     ProtocolIE-ID ::= 609
id-HSDPA-Capability
                                                                                                                                                     ProtocolTE-ID ::= 610
id-HSDSCH-Resources-Information-AuditRsp
                                                                                                                                                     ProtocolIE-ID ::= 611
id-HSDSCH-Resources-Information-ResourceStatusInd
                                                                                                                                                     ProtocolIE-ID ::= 612
id-HSDSCH-MACdFlows-to-Add
                                                                                                                                                     ProtocolIE-ID ::= 613
id-HSDSCH-MACdFlows-to-Delete
                                                                                                                                                     ProtocolIE-ID ::= 614
id-HSDSCH-Information-to-Modify-Unsynchronised
                                                                                                                                                     ProtocolIE-ID ::= 615
                                                                                                                                                     ProtocolIE-ID ::= 616
id-TnlOos
id-Received-total-wide-band-power-For-CellPortion-Value
                                                                                                                                                     ProtocolIE-ID ::= 617
id-Transmitted-Carrier-Power-For-CellPortion
                                                                                                                                                     ProtocolIE-ID ::= 618
id-Transmitted-Carrier-Power-For-CellPortion-Value
                                                                                                                                                     ProtocolIE-ID ::= 619
id-Transmitted Carrier Power Of All Codes Not Used For HS-PDS CH-HS-SCCH-E-AGCH-E-RGCHOTE-HICH Transmission Cell Portion Control Con
                                                                                                                                                                                                                                                              ProtocolIE-ID ::= 620
id-Transmitted Carrier Power Of All Codes Not Used For HS-PDS CH-HS-SCCH-E-AGCH-E-RGCHOTE-HICH Transmission Cell Portion Value and Codes Not Used For HS-SCCH-E-AGCH-E-RGCHOTE-HICH Transmission Cell Portion Value and Codes Not Used For HS-SCCH-E-AGCH-E-RGCHOTE-HICH Transmission Cell Portion Value and Codes Not Used For HS-SCCH-E-AGCH-E-RGCHOTE-HICH Transmission Cell Portion Value and Codes Not Used For HS-SCCH-E-AGCH-E-AGCH-E-RGCHOTE-HICH Transmission Cell Portion Value and Codes Not Used For HS-SCCH-E-AGCH-E-AGCH-E-RGCHOTE-HICH Transmission Cell Portion Value and Codes Not Used For HS-SCCH-E-AGCH-E-AGCH-E-RGCHOTE-HICH Transmission Cell Portion Value and Codes Not Used For HS-SCCH-E-AGCH-E-AGCH-E-AGCH-E-AG
                                                                                                                                                                                                                                                             Protocol TE-ID ::= 621
id-UpPTSInterferenceValue
                                                                                                                                                     ProtocolIE-ID ::= 622
id-PrimaryCCPCH-RSCP-Delta
                                                                                                                                                     ProtocolIE-ID ::= 623
id-MeasurementRecoveryBehavior
                                                                                                                                                     ProtocolIE-ID ::= 624
id-MeasurementRecoveryReportingIndicator
                                                                                                                                                     ProtocolIE-ID ::= 625
id-MeasurementRecoverySupportIndicator
                                                                                                                                                     ProtocolIE-ID ::= 626
id-Tstd-indicator
                                                                                                                                                     ProtocolIE-ID ::= 627
id-multiple-RL-Information-RL-ReconfPrepTDD
                                                                                                                                                     ProtocolIE-ID ::= 628
id-multiple-RL-Information-RL-ReconfRgstTDD
                                                                                                                                                     ProtocolIE-ID ::= 629
id-DL-DPCH-Power-Information-RL-ReconfPrepFDD
                                                                                                                                                     ProtocolIE-ID ::= 630
id-F-DPCH-Information-RL-ReconfPrepFDD
                                                                                                                                                     ProtocolTE-ID ::= 631
id-F-DPCH-Information-RL-SetupRgstFDD
                                                                                                                                                     ProtocolIE-ID ::= 632
id-Additional-S-CCPCH-Parameters-CTCH-ReconfRgstTDD
                                                                                                                                                     ProtocolIE-ID ::= 633
id-Additional-S-CCPCH-Parameters-CTCH-SetupRgstTDD
                                                                                                                                                     ProtocolIE-ID ::= 634
id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRqstTDD
                                                                                                                                                     ProtocolIE-ID ::= 635
id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRgstTDD
                                                                                                                                                     ProtocolIE-ID ::= 636
id-MICH-CFN
                                                                                                                                                     ProtocolIE-ID ::= 637
id-MICH-Information-AuditRsp
                                                                                                                                                     ProtocolIE-ID ::= 638
                                                                                                                                                     ProtocolIE-ID ::= 639
id-MICH-Information-ResourceStatusInd
id-MICH-Parameters-CTCH-ReconfRgstFDD
                                                                                                                                                     ProtocolIE-ID ::= 640
id-MICH-Parameters-CTCH-ReconfRqstTDD
                                                                                                                                                     ProtocolIE-ID ::= 641
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1137

id-MICH-Parameters-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 642
id-MICH-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 643
id-Modification-Period	ProtocolIE-ID ::= 644
id-NI-Information-NotifUpdateCmd	ProtocolIE-ID ::= 645
id-S-CCPCH-InformationListExt-AuditRsp	ProtocolIE-ID ::= 646
id-S-CCPCH-InformationListExt-ResourceStatusInd	ProtocolIE-ID ::= 647
id-S-CCPCH-LCR-InformationListExt-AuditRsp	ProtocolIE-ID ::= 648
id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd	ProtocolIE-ID ::= 649
id-HARQ-Preamble-Mode	ProtocolIE-ID ::= 650
id-Initial-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 651
id-Initial-DL-DPCH-TimingAdjustment-Allowed	ProtocolIE-ID ::= 652
id-DLTransmissionBranchLoadValue	ProtocolIE-ID ::= 653
id-Power-Local-Cell-Group-choice-CM-Rqst	ProtocolIE-ID ::= 654
id-Power-Local-Cell-Group-choice-CM-Rsp	ProtocolIE-ID ::= 655
id-Power-Local-Cell-Group-choice-CM-Rprt	ProtocolIE-ID ::= 656
id-SynchronisationIndicator	ProtocolIE-ID ::= 657
id-HSDPA-And-EDCH-CellPortion-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 658
id-Unused-ProtocolIE-ID-659	ProtocolIE-ID ::= 659
id-HS-DSCHRequiredPowerValue-For-Cell-Portion	ProtocolIE-ID ::= 660
id-HS-DSCHRequiredPowerValueInformation-For-CellPortion	ProtocolIE-ID ::= 661
id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion	ProtocolIE-ID ::= 662
id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code	ProtocolIE-ID ::= 663
id-E-AGCH-FDD-Code-Information	ProtocolIE-ID ::= 664
id-E-DCH-Capability	ProtocolIE-ID ::= 665
id-E-DCH-FDD-DL-Control-Channel-Information	ProtocolIE-ID ::= 666
id-E-DCH-FDD-Information	ProtocolIE-ID ::= 667
id-E-DCH-FDD-Information-Response	ProtocolIE-ID ::= 668
id-E-DCH-FDD-Information-to-Modify	ProtocolIE-ID ::= 669
id-E-DCH-MACdFlows-to-Add	ProtocolIE-ID ::= 670
id-E-DCH-MACdFlows-to-Delete	ProtocolIE-ID ::= 670
id-E-DCH-Resources-Information-AuditRsp id-E-DCH-Resources-Information-ResourceStatusInd	ProtocolIE-ID ::= 672
	ProtocolIE-ID ::= 673
id-E-DCH-RL-Indication	ProtocolIE-ID ::= 674
id-E-DCH-RL-Set-ID	ProtocolIE-ID ::= 675
id-E-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 676
id-E-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 677
id-E-RGCH-E-HICH-FDD-Code-Information	ProtocolIE-ID ::= 678
id-Serving-E-DCH-RL-ID	ProtocolIE-ID ::= 679
id-UL-DPDCH-Indicator-For-E-DCH-Operation	ProtocolIE-ID ::= 680
id-FDD-S-CCPCH-FrameOffset-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 681
id-E-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 682
id-Maximum-Target-ReceivedTotalWideBandPower	ProtocolIE-ID ::= 683
id-E-DCHProvidedBitRateValueInformation	ProtocolIE-ID ::= 684
id-HARQ-Preamble-Mode-Activation-Indicator	ProtocolIE-ID ::= 685
id-RL-Specific-E-DCH-Info	ProtocolIE-ID ::= 686
id-E-DCH-CapacityConsumptionLaw	ProtocolIE-ID ::= 687
id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp	ProtocolIE-ID ::= 688
id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp	ProtocolIE-ID ::= 689
id-E-DCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 690
id-Unused-ProtocolIE-ID-691	ProtocolIE-ID ::= 691
id-multipleRL-dl-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 692
id-Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio	ProtocolIE-ID ::= 693
id-CellPortion-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 694
id-CellPortion-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 695
	== :: 333

id-multiple-PUSCH-InfoList-DM-Rsp	ProtocolIE-ID ::= 696
id-multiple-PUSCH-InfoList-DM-Rprt	ProtocolIE-ID ::= 697
id-Reference-ReceivedTotalWideBandPower	ProtocolIE-ID ::= 698
id-E-DCH-Serving-Cell-Change-Info-Response	ProtocolIE-ID ::= 699
id-HS-DSCH-Serving-Cell-Change-Info	ProtocolIE-ID ::= 700
id-HS-DSCH-Serving-Cell-Change-Info-Response	ProtocolIE-ID ::= 701
id-Serving-Cell-Change-CFN	ProtocolIE-ID ::= 702
id-E-DCH-HARQ-Combining-Capability	ProtocolIE-ID ::= 703
id-E-DCH-TTI2ms-Capability	ProtocolIE-ID ::= 704
id-E-DCH-SF-Capability	ProtocolIE-ID ::= 705
id-E-DCH-FDD-Update-Information	ProtocolIE-ID ::= 706
id-F-DPCH-Capability	ProtocolIE-ID ::= 707
id-E-DCH-Non-serving-Relative-Grant-Down-CommandsValue	ProtocolIE-ID ::= 708
id-HSSICH-SIRTarget	ProtocolIE-ID ::= 709
id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp	ProtocolIE-ID ::= 710
id-PLCCH-Information-AuditRsp	ProtocolIE-ID ::= 711
id-PLCCH-Information-ResourceStatusInd	ProtocolIE-ID ::= 712
id-PLCCH-Information-RL-ReconfPrepTDDLCR	ProtocolIE-ID ::= 713
id-PLCCH-Information-UL-TimeslotLCR-Info	ProtocolIE-ID ::= 714
id-PLCCH-InformationList-AuditRsp	ProtocolIE-ID ::= 715
id-PLCCH-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 716
id-PLCCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 717
id-S-CCPCH-768-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 718
id-PICH-768-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 719
id-PRACH-768-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 720
id-S-CCPCH-768-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 721
id-PICH-768-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 722
id-MICH-768-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 723
id-CommonPhysicalChannelID768-CommonTrChDeletionReq	ProtocolIE-ID ::= 724
id-S-CCPCH-768-InformationList-AuditRsp	ProtocolIE-ID ::= 725
id-S-CCPCH-768-Information-AuditRsp	ProtocolIE-ID ::= 726
id-neighbouringTDDCellMeasurementInformation768	ProtocolIE-ID ::= 727
id-PCCPCH-768-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 728
id-SCH-768-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 729
id-SCH-768-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 730
id-PCCPCH-768-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 731
id-P-CCPCH-768-Information-AuditRsp	ProtocolIE-ID ::= 732
id-PICH-768-Information-AuditRsp	ProtocolIE-ID ::= 733
id-PRACH-768-InformationList-AuditRsp	ProtocolIE-ID ::= 734
id-SCH-768-Information-AuditRsp	ProtocolIE-ID ::= 735
id-MICH-768-Information-AuditRsp	ProtocolIE-ID ::= 736
id-PRACH-768-Information	ProtocolIE-ID ::= 737
id-S-CCPCH-768-Information-ResourceStatusInd	ProtocolIE-ID ::= 738
id-P-CCPCH-768-Information-ResourceStatusInd	ProtocolIE-ID ::= 739
id-PICH-768-Information-ResourceStatusInd	ProtocolIE-ID ::= 740
id-PRACH-768-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 741
id-SCH-768-Information-ResourceStatusInd	ProtocolIE-ID ::= 742
id-MICH-768-Information-ResourceStatusInd	ProtocolIE-ID ::= 743
id-S-CCPCH-768-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 744
id-UL-DPCH-768-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 745
id-DL-DPCH-768-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 746
id-DL-DPCH-InformationItem-768-RL-AdditionRqstTDD	ProtocolIE-ID ::= 747
id-UL-DPCH-InformationItem-768-RL-AdditionRqstTDD	ProtocolIE-ID ::= 748
id-UL-DPCH-768-InformationAddItemIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 749

id-UL-DPCH-768-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 750
id-UL-DPCH-768-InformationModify-AddItem	ProtocolIE-ID ::= 751
id-UL-DPCH-768-InformationModify-AddList	ProtocolIE-ID ::= 752
id-UL-Timeslot768-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 753
id-DL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 754
id-DL-DPCH-768-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 755
id-DL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 756
id-DL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 757
id-DL-Timeslot-768-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 758
id-DPCH-ID768-DM-Rqst	ProtocolIE-ID ::= 759
id-multiple-DedicatedMeasurementValueList-768-TDD-DM-Rsp	ProtocolIE-ID ::= 760
id-DPCH-ID768-DM-Rsp	ProtocolIE-ID ::= 761
id-Rx-Timing-Deviation-Value-768	ProtocolIE-ID ::= 762
id-DPCH-ID768-DM-Rprt	ProtocolIE-ID ::= 763
id-PDSCH-AddInformation-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 764
id-PDSCH-ModifyInformation-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 765
id-PUSCH-AddInformation-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 766
id-PUSCH-ModifyInformation-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 767
id-dL-HS-PDSCH-Timeslot-Information-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 768
id-hS-SCCH-Information-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 769
id-hS-SCCH-InformationModify-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 770
id-hsSCCH-Specific-Information-ResponseTDD768	ProtocolIE-ID ::= 771
id-E-DPCH-Information-RL-AdditionReqFDD	ProtocolIE-ID ::= 772
id-PDSCH-Timeslot-Format-PSCH-ReconfRqst-LCR	ProtocolIE-ID ::= 775
id-PUSCH-Timeslot-Format-PSCH-ReconfRqst-LCR	ProtocolIE-ID ::= 780
id-E-DCH-PowerOffset-for-SchedulingInfo	ProtocolIE-ID ::= 782
id-HSDSCH-Configured-Indicator	ProtocolIE-ID ::= 783
id-Rx-Timing-Deviation-Value-384-ext	ProtocolIE-ID ::= 786
id-RTWP-ReportingIndicator	ProtocolIE-ID ::= 787
id-RTWP-CellPortion-ReportingIndicator	ProtocolIE-ID ::= 788
id-Received-Scheduled-EDCH-Power-Share-Value	ProtocolIE-ID ::= 789
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value	ProtocolIE-ID ::= 790
id-Received-Scheduled-EDCH-Power-Share	ProtocolIE-ID ::= 791
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion	ProtocolIE-ID ::= 792
id-tFCI-Presence	ProtocolIE-ID ::= 793
id-HSSICH-TPC-StepSize	ProtocolIE-ID ::= 794
id-E-RUCCH-InformationList-AuditRsp	ProtocolIE-ID ::= 795
id-E-RUCCH-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 796
id-E-DCH-TDD-CapacityConsumptionLaw	ProtocolIE-ID ::= 797
id-E-RUCCH-Information	ProtocolIE-ID ::= 798
id-E-DCH-Information	ProtocolIE-ID ::= 799
id-E-DCH-Information-Response	ProtocolIE-ID ::= 800
id-E-DCH-Information-Reconfig	ProtocolIE-ID ::= 801
id-E-PUCH-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 802
id-Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 803
id-Modify-E-AGCH-Resource-Pool-PSCH-ReconfRast	ProtocolIE-ID ::= 804
id-Delete-From-E-AGCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 805
id-E-HICH-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 806
id-E-HICH-TimeOffset	ProtocolIE-ID ::= 807
id-Maximum-Generated-ReceivedTotalWideBandPowerInOtherCells	ProtocolIE-ID ::= 808
id-E-DCH-Serving-RL-ID	ProtocolIE-ID ::= 809
id-E-RUCCH-768-InformationList-AuditRsp	ProtocolIE-ID ::= 810
id-E-RUCCH-768-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 811
id-E-RUCCH-768-Information	ProtocolIE-ID ::= 812

id-E-DCH-768-Information	ProtocolIE-ID ::= 813
id-E-DCH-768-Information-Reconfig	ProtocolIE-ID ::= 814
id-E-PUCH-Information-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 815
id-Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 816
id-Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 817
id-E-HICH-Information-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 818
id-ExtendedPropagationDelay	ProtocolIE-ID ::= 819
id-Extended-Round-Trip-Time-Value	ProtocolIE-ID ::= 820
id-AlternativeFormatReportingIndicator	ProtocolIE-ID ::= 821
id-DCH-Indicator-For-E-DCH-HSDPA-Operation	ProtocolIE-ID ::= 822
id-Reference-ReceivedTotalWideBandPowerReporting	ProtocolIE-ID ::= 823
id-Reference-ReceivedTotalWideBandPowerSupportIndicator	ProtocolIE-ID ::= 824
id-ueCapability-Info	ProtocolIE-ID ::= 825
id-MAChs-ResetIndicator	ProtocolIE-ID ::= 826
id-Fast-Reconfiquration-Mode	ProtocolIE-ID ::= 827
id-Fast-Reconfiguration-Permission	ProtocolIE-ID ::= 828
id-BroadcastReference	ProtocolIE-ID ::= 829
id-BroadcastCommonTransportBearerIndication	ProtocolIE-ID ::= 830
id-ContinuousPacketConnectivityDTX-DRX-Capability	ProtocolIE-ID ::= 831
id-ContinuousPacketConnectivityDTX-DRX-Information	ProtocolIE-ID ::= 832
id-ContinuousPacketConnectivityHS-SCCH-less-Capability	ProtocolIE-ID ::= 833
id-ContinuousPacketConnectivityHS-SCCH-less-Information	ProtocolIE-ID ::= 834
id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response	ProtocolIE-ID ::= 835
id-CPC-Information	ProtocolIE-ID ::= 836
id-MIMO-Capability	ProtocolIE-ID ::= 837
id-MIMO-Capability id-MIMO-PilotConfiguration	ProtocolIE-ID ::= 838
id-MBSFN-Cell-ParameterID-Cell-SetupRqstTDD	ProtocolIE-ID ::= 838 ProtocolIE-ID ::= 841
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id-MBSFN-Cell-ParameterID-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 842
id-S-CCPCH-Modulation	ProtocolIE-ID ::= 843
id-HS-PDSCH-Code-Change-Grant	ProtocolIE-ID ::= 844
id-HS-PDSCH-Code-Change-Indicator	ProtocolIE-ID ::= 845
id-SYNC-UL-Partition-LCR	ProtocolIE-ID ::= 846
id-E-DCH-LCR-Information	ProtocolIE-ID ::= 847
id-E-DCH-LCR-Information-Reconfig	ProtocolIE-ID ::= 848
id-E-PUCH-Information-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 852
id-Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 853
id-Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 854
id-Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 855
id-Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 856
id-Delete-From-E-HICH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 857
id-E-HICH-TimeOffsetLCR	ProtocolIE-ID ::= 858
id-SixtyfourQAM-DL-Capability	ProtocolIE-ID ::= 860
id-SixteenQAM-UL-Capability	ProtocolIE-ID ::= 861
id-HSDSCH-MACdPDU-SizeCapability	ProtocolIE-ID ::= 864
id-HSDSCH-MACdPDUSizeFormat	ProtocolIE-ID ::= 865
id-MaximumMACdPDU-SizeExtended	ProtocolIE-ID ::= 866
id-F-DPCH-SlotFormat	ProtocolIE-ID ::= 870
id-F-DPCH-SlotFormatCapability	ProtocolIE-ID ::= 871
id-LCRTDD-uplink-Physical-Channel-Capability	ProtocolIE-ID ::= 872
id-Extended-RNC-ID	ProtocolIE-ID ::= 873
id-Max-UE-DTX-Cycle	ProtocolIE-ID ::= 874
id-Secondary-CCPCH-SlotFormat-Extended	ProtocolIE-ID ::= 876
id-MBSFN-Only-Mode-Indicator-Cell-SetupRqstTDD-LCR	ProtocolIE-ID ::= 878
id-MBSFN-Only-Mode-Capability	ProtocolIE-ID ::= 879

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id-Time-Slot-Parameter-ID
                                                                     ProtocolIE-ID ::= 880
id-Additional-failed-HS-STCH
                                                                     ProtocolIE-ID ::= 881
id-Additional-missed-HS-SICH
                                                                     ProtocolIE-ID ::= 882
id-Additional-total-HS-SICH
                                                                     ProtocolIE-ID ::= 883
id-Additional-HS-SICH-Reception-Quality-Measurement-Value
                                                                     ProtocolIE-ID ::= 884
                                                                     ProtocolIE-ID ::= 887
id-GANSS-Common-Data
id-GANSS-Information
                                                                     ProtocolIE-ID ::= 888
                                                                     ProtocolIE-ID ::= 889
id-GANSS-Generic-Data
id-TUTRANGANSSMeasurementThresholdInformation
                                                                     ProtocolTE-TD ::= 890
id-TUTRANGANSSMeasurementValueInformation
                                                                     ProtocolIE-ID ::= 891
id-ModulationPO-MBSFN
                                                                     ProtocolIE-ID ::= 892
                                                                     ProtocolIE-ID ::= 895
id-Enhanced-FACH-Capability
                                                                     ProtocolIE-ID ::= 896
id-Enhanced-PCH-Capability
id-HSDSCH-Common-System-InformationFDD
                                                                     ProtocolIE-ID ::= 897
id-HSDSCH-Common-System-Information-ResponseFDD
                                                                     ProtocolIE-ID ::= 898
id-HSDSCH-Paging-System-InformationFDD
                                                                     ProtocolIE-ID ::= 899
id-HSDSCH-Paging-System-Information-ResponseFDD
                                                                     ProtocolIE-ID ::= 900
id-MBMS-Capability
                                                                     ProtocolIE-ID ::= 901
id-Ext-Reference-E-TFCI-PO
                                                                     ProtocolIE-ID ::= 902
id-Ext-Max-Bits-MACe-PDU-non-scheduled
                                                                     ProtocolIE-ID ::= 903
id-HARQ-MemoryPartitioningInfoExtForMIMO
                                                                     ProtocolTE-TD ::= 904
id-MIMO-ActivationIndicator
                                                                     ProtocolIE-ID ::= 905
id-MTMO-Mode-Indicator
                                                                     ProtocolTE-ID ::= 906
                                                                     ProtocolIE-ID ::= 907
id-MIMO-N-M-Ratio
                                                                     ProtocolIE-ID ::= 908
id-IPMulticastIndication
id-IPMulticastDataBearerIndication
                                                                     ProtocolIE-ID ::= 909
id-TransportBearerNotSetupIndicator
                                                                     ProtocolIE-ID ::= 910
id-TransportBearerNotReguestedIndicator
                                                                     ProtocolIE-ID ::= 911
id-TimeSlotConfigurationList-LCR-CTCH-SetupRgstTDD
                                                                     ProtocolIE-ID ::= 912
id-Cell-Frequency-List-Information-LCR-MulFreq-AuditRsp
                                                                     ProtocolIE-ID ::= 913
id-Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp
                                                                     ProtocolIE-ID ::= 914
id-Cell-Frequency-List-LCR-MulFreq-Cell-SetupRqstTDD
                                                                     ProtocolIE-ID ::= 915
id-UARFCN-Adjustment
                                                                     ProtocolIE-ID ::= 916
id-Cell-Frequency-List-Information-LCR-MulFreq-ResourceStatusInd
                                                                     ProtocolIE-ID ::= 917
id-Cell-Frequency-List-InformationItem-LCR-MulFreq-ResourceStatusInd
                                                                         ProtocolIE-ID ::= 918
id-UPPCHPositionLCR
                                                                     ProtocolIE-ID ::= 919
id-UPPCH-LCR-Parameters-CTCH-ReconfRgstTDD
                                                                     ProtocolIE-ID ::= 920
id-UPPCH-LCR-InformationList-AuditRsp
                                                                     ProtocolIE-ID ::= 921
id-UPPCH-LCR-InformationItem-AuditRsp
                                                                     ProtocolIE-ID ::= 922
id-UPPCH-LCR-InformationList-ResourceStatusInd
                                                                     ProtocolIE-ID ::= 923
id-UPPCH-LCR-InformationItem-ResourceStatusInd
                                                                     ProtocolIE-ID ::= 924
id-multipleFreq-dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                                                         ProtocolIE-ID ::= 925
id-number-Of-Supported-Carriers
                                                                     ProtocolIE-ID ::= 926
id-multipleFreg-HSPDSCH-InformationList-ResponseTDDLCR
                                                                     ProtocolTE-TD ::= 927
id-Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD
                                                                     ProtocolIE-ID ::= 928
id-multipleFreq-HS-DSCH-Resources-InformationList-AuditRsp
                                                                     ProtocolIE-ID ::= 929
id-multipleFreg-HS-DSCH-Resources-InformationList-ResourceStatusInd ProtocolIE-ID ::= 930
id-UARFCNSpecificCauseList
                                                                     ProtocolIE-ID ::= 931
id-tSN-Length
                                                                     ProtocolIE-ID ::= 932
id-MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst
                                                                             ProtocolIE-ID ::= 933
id-multicarrier-number
                                                                     ProtocolIE-ID ::= 934
id-Extended-HS-SCCH-ID
                                                                     ProtocolIE-ID ::= 935
id-Extended-HS-SICH-ID
                                                                     ProtocolIE-ID ::= 936
                                                                     ProtocolIE-ID ::= 937
id-HSSICH-InfoExt-DM-Rqst
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id Delete Hoom HG GGGH Descripto Deal Hot DGGH Descriptors	ProtocolIE-ID ::= 938
id-Delete-From-HS-SCCH-Resource-PoolExt-PSCH-ReconfRqst	
id-HS-SCCH-InformationExt-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 939
id-HS-SCCH-InformationModifyExt-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 940
id-PowerControlGAP	ProtocolIE-ID ::= 941
id-MBSFN-SpecialTimeSlot-LCR	ProtocolIE-ID ::= 942
id-Common-MACFlows-to-DeleteFDD	ProtocolIE-ID ::= 943
id-Paging-MACFlows-to-DeleteFDD	ProtocolIE-ID ::= 944
id-E-TFCI-Boost-Information	ProtocolIE-ID ::= 945
id-SixteenQAM-UL-Operation-Indicator	ProtocolIE-ID ::= 946
id-SixtyfourQAM-UsageAllowedIndicator	ProtocolIE-ID ::= 947
id-SixtyfourQAM-DL-UsageIndicator	ProtocolIE-ID ::= 948
id-Default-Serving-Grant-in-DTX-Cycle2	ProtocolIE-ID ::= 949
id-Maximum-Target-ReceivedTotalWideBandPower-LCR	ProtocolIE-ID ::= 950
id-E-DPDCH-PowerInterpolation	ProtocolIE-ID ::= 951
id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory	ProtocolIE-ID ::= 952
id-MultipleFreq-E-DCH-Resources-InformationList-AuditRsp	ProtocolIE-ID ::= 953
$\verb id-Mu  tiple Freq-E-DCH-Resources-Information List-Resource Status Ind  \\$	
$\verb id-MultipleFreq-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRqs  \\$	
id-MultipleFreq-E-PUCH-Timeslot-Information-LCRItem-PSCH-ReconfRqs	st ProtocolIE-ID ::= 956
id-Extended-E-HICH-ID-TDD	ProtocolIE-ID ::= 957
id-ContinuousPacketConnectivityHS-SCCH-less-Deactivate-Indicator	ProtocolIE-ID ::= 958
id-E-DCH-MACdPDU-SizeCapability	ProtocolIE-ID ::= 959
id-E-DCH-MACdPDUSizeFormat	ProtocolIE-ID ::= 960
id-MaximumNumber-Of-Retransmission-for-Scheduling-Info-LCRTDD	ProtocolIE-ID ::= 961
id-E-DCH-RetransmissionTimer-for-SchedulingInfo-LCRTDD	ProtocolIE-ID ::= 962
id-E-HICH-TimeOffset-Extension	ProtocolIE-ID ::= 963
id-MultipleFreg-E-HICH-TimeOffsetLCR	ProtocolIE-ID ::= 964
id-E-PUCH-PowerControlGAP	ProtocolIE-ID ::= 965
id-HSDSCH-TBSizeTableIndicator	ProtocolIE-ID ::= 966
id-E-DCH-DL-Control-Channel-Change-Information	ProtocolIE-ID ::= 967
id-E-DCH-DL-Control-Channel-Grant-Information	ProtocolIE-ID ::= 968
id-DGANSS-Corrections-Req	ProtocolIE-ID ::= 969
id-UE-with-enhanced-HS-SCCH-support-indicator	ProtocolIE-ID ::= 970
id-AdditionalTimeSlotListLCR	ProtocolIE-ID ::= 971
id-AdditionalMeasurementValueList	ProtocolIE-ID ::= 972
id-E-AGCH-Table-Choice	ProtocolIE-ID ::= 978
id-PLCCH-parameters	ProtocolIE-ID ::= 981
<u>-</u>	ProtocoliE-ID ::= 981 ProtocoliE-ID ::= 982
id-E-RUCCH-parameters	
id-E-RUCCH-768-parameters	ProtocolIE-ID ::= 983
id-HS-Cause	ProtocolIE-ID ::= 984
id-E-Cause	ProtocolIE-ID ::= 985
id-Common-EDCH-Capability	ProtocolIE-ID ::= 987
1 1	rotocolIE-ID ::= 988
id-Common-EDCH-System-InformationFDD	ProtocolIE-ID ::= 989
id-Common-UL-MACFlows-to-DeleteFDD	ProtocolIE-ID ::= 990
id-Common-EDCH-MACdFlows-to-DeleteFDD	ProtocolIE-ID ::= 991
id-Common-EDCH-System-Information-ResponseFDD	ProtocolIE-ID ::= 992
id-Cell-ERNTI-Status-Information	ProtocolIE-ID ::= 993
id-Enhanced-UE-DRX-Capability	ProtocolIE-ID ::= 994
id-Enhanced-UE-DRX-InformationFDD	ProtocolIE-ID ::= 995
id-TransportBearerRequestIndicator	ProtocolIE-ID ::= 996
id-SixtyfourQAM-DL-MIMO-Combined-Capability	ProtocolIE-ID ::= 997
id-E-RNTI	ProtocolIE-ID ::= 998
id-MinimumReducedE-DPDCH-GainFactor	ProtocolIE-ID ::= 999

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id-GANSS-Time-ID
                                                                    ProtocolIE-ID ::= 1000
id-GANSS-AddIonoModelReg
                                                                    ProtocolIE-ID ::= 1001
id-GANSS-EarthOrientParaReg
                                                                    ProtocolIE-ID ::= 1002
id-GANSS-AddNavigationModelsReg
                                                                    ProtocolIE-ID ::= 1003
id-GANSS-AddUTCModelsReg
                                                                    ProtocolIE-ID ::= 1004
id-GANSS-AuxInfoReg
                                                                    ProtocolIE-ID ::= 1005
id-GANSS-SBAS-ID
                                                                    ProtocolIE-ID ::= 1006
                                                                    ProtocolIE-ID ::= 1007
id-GANSS-ID
id-GANSS-Additional-Ionospheric-Model
                                                                    ProtocolIE-ID ::= 1008
id-GANSS-Earth-Orientation-Parameters
                                                                    ProtocolIE-ID ::= 1009
id-GANSS-Additional-Time-Models
                                                                    ProtocolIE-ID ::= 1010
id-GANSS-Additional-Navigation-Models
                                                                    ProtocolIE-ID ::= 1011
id-GANSS-Additional-UTC-Models
                                                                    ProtocolIE-ID ::= 1012
id-GANSS-Auxiliary-Information
                                                                    ProtocolIE-ID ::= 1013
id-ERACH-CM-Rast
                                                                     ProtocolIE-ID ::= 1014
id-ERACH-CM-Rsp
                                                                    ProtocolIE-ID ::= 1015
id-ERACH-CM-Rprt
                                                                    ProtocolIE-ID ::= 1016
id-EDCH-RACH-Report-Value
                                                                    ProtocolIE-ID ::= 1017
id-EDCH-RACH-Report-IncrDecrThres
                                                                     ProtocolIE-ID ::= 1018
id-EDCH-RACH-Report-ThresholdInformation
                                                                     ProtocolTE-TD ::= 1019
id-E-DPCCH-Power-Boosting-Capability
                                                                    ProtocolIE-ID ::= 1020
id-HSDSCH-Common-System-InformationLCR
                                                                     ProtocolIE-ID ::= 1021
id-HSDSCH-Common-System-Information-ResponseLCR
                                                                    ProtocolIE-ID ::= 1222
id-HSDSCH-Paging-System-InformationLCR
                                                                    ProtocolIE-ID ::= 1023
id-HSDSCH-Paging-System-Information-ResponseLCR
                                                                    ProtocolIE-ID ::= 1024
id-Common-MACFlows-to-DeleteLCR
                                                                    ProtocolIE-ID ::= 1025
id-Paging-MACFlows-to-DeleteLCR
                                                                     ProtocolIE-ID ::= 1026
id-Common-EDCH-System-InformationLCR
                                                                    ProtocolIE-ID ::= 1027
id-Common-UL-MACFlows-to-DeleteLCR
                                                                     ProtocolIE-ID ::= 1028
id-Common-EDCH-MACdFlows-to-DeleteLCR
                                                                    ProtocolIE-ID ::= 1029
id-Common-EDCH-System-Information-ResponseLCR
                                                                     ProtocolIE-ID ::= 1030
id-Enhanced-UE-DRX-CapabilityLCR
                                                                    ProtocolIE-ID ::= 1031
id-Enhanced-UE-DRX-InformationLCR
                                                                    ProtocolIE-ID ::= 1032
id-HSDSCH-PreconfigurationSetup
                                                                    ProtocolIE-ID ::= 1033
id-HSDSCH-PreconfigurationInfo
                                                                    ProtocolIE-ID ::= 1034
id-NoOfTargetCellHS-SCCH-Order
                                                                     ProtocolIE-ID ::= 1035
                                                                    ProtocolIE-ID ::= 1036
id-EnhancedHSServingCC-Abort
id-Additional-HS-Cell-Information-RL-Setup
                                                                     ProtocolTE-TD \cdot \cdot = 1037
                                                                    ProtocolIE-ID ::= 1038
id-Additional-HS-Cell-Information-Response
id-Additional-HS-Cell-Information-RL-Addition
                                                                    ProtocolIE-ID ::= 1039
id-Additional-HS-Cell-Change-Information-Response
                                                                    ProtocolIE-ID ::= 1040
id-Additional-HS-Cell-Information-RL-Reconf-Prep
                                                                    ProtocolIE-ID ::= 1041
id-Additional-HS-Cell-Information-RL-Reconf-Reg
                                                                     ProtocolIE-ID ::= 1042
id-Additional-HS-Cell-Information-RL-Param-Upd
                                                                    ProtocolIE-ID ::= 1043
id-Multi-Cell-Capability-Info
                                                                     ProtocolIE-ID ::= 1044
id-IMB-Parameters
                                                                    ProtocolIE-ID ::= 1045
id-MACes-Maximum-Bitrate-LCR
                                                                    ProtocolIE-ID ::= 1046
id-Semi-PersistentScheduling-CapabilityLCR
                                                                    ProtocolIE-ID ::= 1047
id-E-DCH-Semi-PersistentScheduling-Information-LCR
                                                                    ProtocolIE-ID ::= 1048
id-HS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                                     ProtocolIE-ID ::= 1049
id-Add-To-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst ProtocolIE-ID ::= 1050
id-Modify-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst ProtocolIE-ID ::= 1051
id-Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst ProtocolIE-ID ::= 1052
id-ContinuousPacketConnectivity-DRX-CapabilityLCR
                                                                     ProtocolIE-ID ::= 1053
```

```
id-ContinuousPacketConnectivity-DRX-InformationLCR
                                                                    ProtocolIE-ID ::= 1054
id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR
                                                                    ProtocolIE-ID ::= 1055
id-CPC-InformationLCR
                                                                    ProtocolIE-ID ::= 1056
id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                    ProtocolIE-ID ::= 1057
id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                    ProtocolIE-ID ::= 1058
id-E-AGCH-UE-Inactivity-Monitor-Threshold
                                                                    ProtocolIE-ID ::= 1059
id-IdleIntervalInformation
                                                                    ProtocolIE-ID ::= 1063
id-GANSS-alm-keplerianNAVAlmanac
                                                                    ProtocolIE-ID ::= 1064
id-GANSS-alm-keplerianReducedAlmanac
                                                                    ProtocolIE-ID ::= 1065
id-GANSS-alm-keplerianMidiAlmanac
                                                                    ProtocolIE-ID ::= 1066
id-GANSS-alm-keplerianGLONASS
                                                                    ProtocolIE-ID ::= 1067
id-GANSS-alm-ecefSBASAlmanac
                                                                    ProtocolIE-ID ::= 1068
                                                                    ProtocolIE-ID ::= 1070
id-HSSICH-ReferenceSignal-InformationLCR
id-MIMO-ReferenceSignal-InformationListLCR
                                                                    ProtocolIE-ID ::= 1071
id-MIMO-SFMode-For-HSPDSCHDualStream
                                                                    ProtocolIE-ID ::= 1072
id-MIMO-SFMode-Supported-For-HSPDSCHDualStream
                                                                    ProtocolIE-ID ::= 1073
id-UE-Selected-MBMS-Service-Information
                                                                    ProtocolIE-ID ::= 1074
id-MultiCarrier-HSDSCH-Physical-Layer-Category
                                                                    ProtocolIE-ID ::= 1077
id-Common-E-DCH-HSDPCCH-Capability
                                                                    ProtocolIE-ID ::= 1078
id-DL-RLC-PDU-Size-Format
                                                                    ProtocolIE-ID ::= 1079
id-HSSICH-ReferenceSignal-InformationModifyLCR
                                                                    ProtocolTE-TD ::= 1080
id-schedulingPriorityIndicator
                                                                    ProtocolIE-ID ::= 1081
id-TimeSlotMeasurementValueListLCR
                                                                    ProtocolIE-ID ::= 1082
id-UE-SupportIndicatorExtension
                                                                    ProtocolIE-ID ::= 1085
id-MIMO-Power-Offset-For-S-CPICH-Capability
                                                                    ProtocolIE-ID ::= 1101
id-MIMO-PilotConfigurationExtension
                                                                    ProtocolIE-ID ::= 1102
id-TxDiversityOnDLControlChannelsByMIMOUECapability
                                                                    ProtocolIE-ID ::= 1103
id-HS-DSCH-SPS-Reservation-Indicator
                                                                    ProtocolIE-ID ::= 1131
id-E-DCH-SPS-Reservation-Indicator
                                                                    ProtocolIE-ID ::= 1132
id-MultipleFreg-HARO-MemoryPartitioning-InformationList
                                                                    ProtocolIE-ID ::= 1133
id-Ul-common-E-DCH-MACflow-Specific-InfoResponseListLCR-Ext
                                                                    ProtocolIE-ID ::= 1134
id-RepetitionPeriodIndex
                                                                    ProtocolIE-ID ::= 1135
id-MidambleShiftLCR
                                                                    ProtocolIE-ID ::= 1136
id-DiversityMode
                                                                    ProtocolIE-ID ::= 1139
id-TransmitDiversitvIndicator
                                                                    ProtocolIE-ID ::= 1140
id-NonCellSpecificTxDiversity
                                                                    ProtocolIE-ID ::= 1141
id-Cell-Capability-Container
                                                                    ProtocolIE-ID ::= 1142
id-E-RNTI-List-Request
                                                                    ProtocolIE-ID ::= 1143
id-E-RNTI-List
                                                                    ProtocolIE-ID ::= 1144
id-PowerControlGAP-For-CellFACHLCR
                                                                    ProtocolIE-ID ::= 1145
id-UL-Synchronisation-Parameters-For-FACHLCR
                                                                    ProtocolIE-ID ::= 1147
id-HS-DSCH-SPS-Operation-Indicator
                                                                    ProtocolIE-ID ::= 1148
id-HSDSCH-RNTI-For-FACH
                                                                    ProtocolIE-ID ::= 1149
id-E-RNTI-For-FACH
                                                                    ProtocolIE-ID ::= 1150
id-Out-of-Sychronization-Window
                                                                    ProtocolIE-ID ::= 1151
id-E-HICH-TimeOffset-ReconfFailureTDD
                                                                    ProtocolIE-ID ::= 1153
id-HSSCCH-TPC-StepSize
                                                                    ProtocolIE-ID ::= 1154
id-Common-System-Information-ResponseLCR
                                                                    ProtocolIE-ID ::= 1157
id-Add-To-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst-Ext ProtocolIE-ID ::= 1161
id-Modify-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst-Ext ProtocolIE-ID ::= 1162
id-Delete-From-Non-HS-SCCH-Associated-HS-SICH-Resource-Pool-LCR-PSCH-ReconfRgst-Ext ProtocolIE-ID ::= 1163
id-Initial-DL-Transmission-Power
                                                                    ProtocolIE-ID ::= 1164
id-Maximum-DL-Power
                                                                    ProtocolIE-ID ::= 1165
id-Minimum-DL-Power
                                                                    ProtocolIE-ID ::= 1166
```

```
id-AssociatedPhsicalChannelID
                                                                    ProtocolIE-ID ::= 1168
id-PhysicalChannelID-for-CommonERNTI-RequestedIndicator
                                                                    ProtocolIE-ID ::= 1170
id-PrecodingWeightSetRestriction
                                                                    ProtocolIE-ID ::= 1171
id-Treset-Usage-Indicator
                                                                    ProtocolIE-ID ::= 1172
id-Non-Serving-RL-Preconfig-Info
                                                                    ProtocolIE-ID ::= 1173
id-Non-Serving-RL-Preconfig-Setup
                                                                    ProtocolIE-ID ::= 1174
id-Non-Serving-RL-Preconfig-Removal
                                                                    ProtocolIE-ID ::= 1175
id-Ul-common-E-DCH-MACflow-Specific-InfoListLCR-Ext
                                                                    ProtocolIE-ID ::= 1178
id-CommonMACFlow-Specific-InfoList-ResponseLCR-Ext
                                                                    ProtocolIE-ID ::= 1179
id-Enabling-Delay-Ext-LCR
                                                                    ProtocolIE-ID ::= 1180
id-HS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext
                                                                    ProtocolIE-ID ::= 1195
```

#### 9.3.7 Container Definitions

```
*****************
-- Container definitions
__ *********************
NBAP-Containers {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Containers (5) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
    ****************
-- IE parameter types from other modules.
__ ********************
IMPORTS
   maxProtocolExtensions,
  maxPrivateIEs,
  maxProtocolIEs,
   Criticality,
   Presence,
   PrivateIE-ID.
   ProtocolIE-ID
FROM NBAP-CommonDataTypes;
__ *******************
-- Class Definition for Protocol IEs
__ **********************
NBAP-PROTOCOL-IES ::= CLASS {
   &id
        ProtocolIE-ID
                          UNIQUE,
```

```
&criticality Criticality,
   &Value,
   &presence Presence
WITH SYNTAX {
   ID
       &id
   CRITICALITY &criticality
             &Value
   PRESENCE
             &presence
  *******************
-- Class Definition for Protocol IEs
NBAP-PROTOCOL-IES-PAIR ::= CLASS {
             ProtocolIE-ID
                                  UNIQUE,
   &firstCriticality Criticality,
   &FirstValue,
   &secondCriticality Criticality,
   &SecondValue,
   &presence
                 Presence
WITH SYNTAX {
             &id
   ID
   FIRST CRITICALITY &firstCriticality
   FIRST TYPE
                 &FirstValue
   SECOND CRITICALITY &secondCriticality
   SECOND TYPE
                 &SecondValue
   PRESENCE
                 &presence
-- Class Definition for Protocol Extensions
__ ********************
NBAP-PROTOCOL-EXTENSION ::= CLASS {
         ProtocolIE-ID
                           UNIQUE,
   &criticality
                Criticality,
   &Extension,
   &presence
                 Presence
WITH SYNTAX {
         &id
   CRITICALITY &criticality
   EXTENSION &Extension
   PRESENCE
             &presence
__ *******************
```

```
-- Class Definition for Private IEs
__ **********************
NBAP-PRIVATE-IES ::= CLASS {
   &id PrivateIE-ID.
   &criticality Criticality,
   &Value,
   &presence
                 Presence
WITH SYNTAX {
   ID &id
   CRITICALITY &criticality
   TYPE &Value
   PRESENCE
             &presence
  *****************
-- Container for Protocol IEs
ProtocolIE-Container {NBAP-PROTOCOL-IES : IesSetParam} ::=
   SEQUENCE (SIZE (0..maxProtocolIEs)) OF
   ProtocolIE-Field {{IesSetParam}}
ProtocolIE-Single-Container {NBAP-PROTOCOL-IES : IesSetParam} ::=
   ProtocolIE-Field {{ IesSetParam}}
ProtocolIE-Field {NBAP-PROTOCOL-IES : IesSetParam} ::= SEQUENCE {
          NBAP-PROTOCOL-IES.&id
                                  ({IesSetParam}),
   criticality NBAP-PROTOCOL-IES.&criticality ({IesSetParam}{@id}),
                                     ({IesSetParam}{@id})
             NBAP-PROTOCOL-IES.&Value
    ****************
-- Container for Protocol IE Pairs
  ·····
ProtocolIE-ContainerPair {NBAP-PROTOCOL-IES-PAIR : IesSetParam} ::=
   SEOUENCE (SIZE (0..maxProtocolIEs)) OF
   ProtocolIE-FieldPair {{IesSetParam}}
ProtocolIE-FieldPair {NBAP-PROTOCOL-IES-PAIR : IesSetParam} ::= SEQUENCE {
                NBAP-PROTOCOL-IES-PAIR.&id
                                                ({IesSetParam}),
   firstCriticality
                        NBAP-PROTOCOL-IES-PAIR.&firstCriticality
                                                             ({IesSetParam}{@id}),
                    NBAP-PROTOCOL-IES-PAIR.&FirstValue ({IesSetParam}{@id}),
   firstValue
   secondCriticality
                       NBAP-PROTOCOL-IES-PAIR.&secondCriticality ({IesSetParam}{@id}),
   secondValue
                    NBAP-PROTOCOL-IES-PAIR. & SecondValue ({IesSetParam}{@id})
```

```
-- Container Lists for Protocol IE Containers
__ **********************
ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES : IesSetParam} ::=
   SEQUENCE (SIZE (lowerBound..upperBound)) OF
   ProtocolIE-Container {{IesSetParam}}
ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES-PAIR : IesSetParam} ::=
   SEQUENCE (SIZE (lowerBound..upperBound)) OF
   ProtocolIE-ContainerPair {{IesSetParam}}
     *****************
-- Container for Protocol Extensions
__ **********************
ProtocolExtensionContainer {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::=
   SEQUENCE (SIZE (1..maxProtocolExtensions)) OF
   ProtocolExtensionField {{ExtensionSetParam}}
ProtocolExtensionField {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
          NBAP-PROTOCOL-EXTENSION.&id ({ExtensionSetParam}),
   criticality NBAP-PROTOCOL-EXTENSION.&criticality
                                                ({ExtensionSetParam}{@id}),
   extensionValue NBAP-PROTOCOL-EXTENSION.&Extension ({ExtensionSetParam}{@id})
    ******************
-- Container for Private Ies
__ *****************
PrivateIE-Container {NBAP-PRIVATE-IES : IesSetParam} ::=
   SEQUENCE (SIZE (1..maxPrivateIEs)) OF
   PrivateIE-Field {{IesSetParam}}
PrivateIE-Field {NBAP-PRIVATE-IES : IesSetParam} ::= SEQUENCE {
             NBAP-PRIVATE-IES.&id
   ({IesSetParam}),
   criticality
                    NBAP-PRIVATE-IES.&criticality
   ({IesSetParam}{@id}),
             NBAP-PRIVATE-IES.&Value
   ({IesSetParam}{@id})
END
```

# 9.4 Message Transfer Syntax

NBAP shall use the ASN.1 Basic Packed Encoding Rules (BASIC-PER) Aligned Variant as transfer syntax as specified in ref. [11].

#### 9.5 Timers

 $T_{Preempt}$ 

- Specifies the maximum time that a Node B may wait for pre-emption of resources for establishment or reconfiguration of Radio Links.

# Handling of Unknown, Unforeseen and Erroneous Protocol Data

#### 10.1 General

Protocol Error cases can be divided into three classes:

- Transfer Syntax Error
- Abstract Syntax Error
- Logical Error

Protocol errors can occur in the following functions within a receiving node:

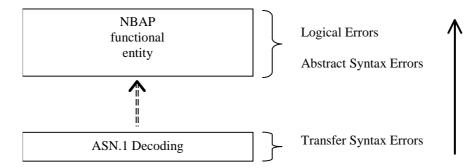


Figure 38: Protocol Errors in NBAP.

The information stated in subclauses 10.2, 10.3 and 10.4, to be included in the message used when reporting an error, is what at minimum shall be included. Other optional information elements within the message may also be included, if available. This is also valid for the case when the reporting is done with a response message. The latter is an exception to what is stated in subclause 4.1.

# 10.2 Transfer Syntax Error

A Transfer Syntax Error occurs when the receiver is not able to decode the received physical message. Transfer syntax errors are always detected in the process of ASN.1 decoding. If a Transfer Syntax Error occurs, the receiver should initiate Error Indication procedure with appropriate cause value for the Transfer Syntax protocol error.

Examples for Transfer Syntax Errors are:

- Violation of value ranges in ASN.1 definition of messages. E.g.: If an IE has a defined value range of 0 to 10 (ASN.1: INTEGER (0..10)), and 12 will be received, then this will be treated as a transfer syntax error.

- Violation in list element constraints. E.g.: If a list is defined as containing 1 to 10 elements, and 12 elements will be received, than this case will be handled as a transfer syntax error.
- Missing mandatory elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).
- Wrong order of elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).

## 10.3 Abstract Syntax Error

#### 10.3.1 General

An Abstract Syntax Error occurs when the receiving functional NBAP entity:

- 1. receives IEs or IE groups that cannot be understood (unknown id);
- 2. receives IEs for which the logical range is violated (e.g.: ASN.1 definition: 0 to 15, the logical range is 0 to 10 (values 11 to 15 are undefined), and 12 will be received; this case will be handled as an abstract syntax error using criticality information sent by the originator of the message);
- 3. does not receive IEs or IE groups but according to the specified presence of the concerned object, the IEs or IE groups should have been present in the received message;
- 4. receives IEs or IE groups that are defined to be part of that message in wrong order or with too many occurrences of the same IE or IE group;
- 5. receives IEs or IE groups but according to the conditional presence of the concerned object and the specified condition, the IEs or IE groups should not have been present in the received message.

Cases 1 and 2 (not comprehended IE/IE group) are handled based on received Criticality information. Case 3 (missing IE/IE group) is handled based on Criticality information and Presence information for the missing IE/IE group specified in the version of the specification used by the receiver. Case 4 (IEs or IE groups in wrong order or with too many occurrences) and Case 5 (erroneously present conditional IEs or IE groups) result in rejecting the procedure.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error that belong to cases 1-3 act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5. The handling of cases 4 and 5 is specified in subclause

### 10.3.2 Criticality Information

In the NBAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.4.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

- Reject IE
- Ignore IE and Notify Sender
- Ignore IE

The following rules restrict when a receiving entity may consider an IE, an IE group or an EP not comprehended (not implemented), and when action based on criticality information is applicable:

1. IE or IE group: When one new or modified IE or IE group is implemented for one EP from a standard version, then other new or modified IEs or IE groups specified for that EP in that standard version shall be considered comprehended by the receiving entity (some may still remain unsupported).

2. EP: The comprehension of different Eps within a standard version or between different standard versions is not mandated. Any EP that is not supported may be considered not comprehended, even if another EP from that standard version is comprehended, and action based on criticality shall be applied.

#### 10.3.3 Presence Information

For many IEs/IE groups which are optional according to the ASN.1 transfer syntax, NBAP specifies separately if the presence of these IEs/IE groups is optional or mandatory with respect to RNS application by means of the presence field of the concerned object of class NBAP-PROTOCOL-IES, NBAP-PROTOCOL-IES-PAIR, NBAP-PROTOCOL-EXTENSION or NBAP-PRIVATE-IES.

The presence field of the indicated classes supports three values:

- 1. Optional;
- 2. Conditional;
- 3. Mandatory.

If an IE/IE group is not included in a received message and the presence of the IE/IE group is mandatory or the presence is conditional and the condition is true according to the version of the specification used by the receiver, an abstract syntax error occurs due to a missing IE/IE group.

If an IE/IE group is included in a received message and the presence of the IE/IE group is conditional and the condition is false according to the version of the specification used by the receiver, an abstract syntax error occurs due to this erroneously present conditional IE/IE group.

#### 10.3.4 Not comprehended IE/IE group

#### 10.3.4.1 Procedure ID

The receiving node shall treat the different types of received criticality information of the *Procedure ID* according to the following:

#### Reject IE:

- If a message is received with a *Procedure ID* marked with '*Reject IE*' which the receiving node does not comprehend, the receiving node shall reject the procedure using the Error Indication procedure.

#### Ignore IE and Notify Sender:

- If a message is received with a *Procedure ID* marked with '*Ignore IE and Notify Sender*' which the receiving node does not comprehend, the receiving node shall ignore the procedure and initiate the Error Indication procedure.

#### **Ignore IE:**

- If a message is received with a *Procedure ID* marked with '*Ignore IE*' which the receiving node does not comprehend, the receiving node shall ignore the procedure.

When using the Error Indication procedure to reject a procedure or to report an ignored procedure it shall include the *Procedure ID* IE, the *Triggering Message* IE, and the *Procedure Criticality* IE in the *Criticality Diagnostics* IE.

#### 10.3.4.1A Type of Message

When the receiving node cannot decode the *Type of Message* IE, the Error Indication procedure shall be initiated with an appropriate cause value.

#### 10.3.4.2 IEs Other Than the Procedure ID and Type of Message

The receiving node shall treat the different types of received criticality information of an IE/IE group other than the *Procedure ID* IE and *Type of Message* IE according to the following:

#### Reject IE:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with '*Reject IE*' which the receiving node does not comprehend; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the rejection of one or more IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing one or more IEs/IE groups marked with '*Reject IE*' which the receiving node does not comprehend, the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a *response* message is received containing one or more IEs/IE groups marked with '*Reject IE*' that the receiving node does not comprehend, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

#### Ignore IE and Notify Sender:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with '*Ignore IE and Notify Sender*' which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and report in the response message of the procedure that one or more IEs/IE groups have been ignored. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report the outcome of the procedure is received containing one or more IEs/IE groups marked with '*Ignore IE and Notify Sender*' which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups, and initiate the Error Indication procedure to report that one or more IEs/IE groups have been ignored.
- If a *response* message is received containing one or more IEs/IE groups marked with '*Ignore IE and Notify Sender*' which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and initiate the Error Indication procedure.

#### **Ignore IE:**

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with '*Ignore IE*' which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.
- If a *response* message is received containing one or more IEs/IE groups marked with '*Ignore IE*' which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.

When reporting not comprehended IEs/IE groups marked with 'Reject IE' or 'Ignore IE and Notify Sender' using a response message defined for the procedure, the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the Message Structure IE shall be included.

When reporting not comprehended IEs/IE groups marked with 'Reject IE' or 'Ignore IE and Notify Sender' using the Error Indication procedure, the Procedure ID IE, the Triggering Message IE, Procedure Criticality IE, the Transaction ID IE, and the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be

included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

#### 10.3.5 Missing IE or IE Group

The receiving node shall treat the missing IE/IE group according to the criticality information for the missing IE/IE group in the received message specified in the version of this specification used by the receiver:

#### **Reject IE:**

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality 'Reject IE'; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the missing IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report unsuccessful outcome is missing one or more IEs/IE groups with specified criticality '*Reject IE*', the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality '*Reject IE*', the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

#### Ignore IE and Notify Sender:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality 'Ignore IE and Notify Sender', the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and report in the response message of the procedure that one or more IEs/IE groups were missing. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report the outcome of the procedure is missing one or more IEs/IE groups with specified criticality '*Ignore IE and Notify Sender*', the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality '*Ignore IE and Notify Sender*', the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.

#### **Ignore IE:**

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality '*Ignore IE*', the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality '*Ignore IE*', the receiving node shall ignore that those IEs/IE groups are missing and continue with the procedure based on the other IEs/IE groups present in the message.

When reporting missing IEs/IE groups with specified criticality 'Reject IE' or 'Ignore IE and Notify Sender' using a response message defined for the procedure, the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the Message Structure IE shall be included.

When reporting missing IEs/IE groups with specified criticality 'Reject IE' or 'Ignore IE and Notify Sender' using the Error Indication procedure, the Procedure ID IE, the Triggering Message IE, Procedure Criticality IE, the Transaction ID IE, and the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be

included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

## 10.3.6 IEs or IE Groups Received in Wrong Order or With Too Many Occurrences or Erroneously Present

If a message with IEs or IE groups in wrong order or with too many occurrences is received or if IEs or IE groups with a conditional presence are present when the condition is not met (i.e. erroneously present), the receiving node shall behave according to the following:

- If a message *initiating* a procedure is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the cause value 'Abstract Syntax Error (Falsely Constructed Message)' using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall terminate the procedure and initiate the Error Indication procedure, and use cause value 'Abstract Syntax Error (Falsely Constructed Message)'.
- If a *response* message is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

When determining the correct order only the IEs specified in the specification version used by the receiver shall be considered.

## 10.4 Logical Error

Logical error situations occur when a message is comprehended correctly, but the information contained within the message is not valid (i.e. semantic error), or describes a procedure which is not compatible with the state of the receiver. In these conditions, the following behaviour shall be performed (unless otherwise specified) as defined by the class of the elementary procedure, irrespective of the criticality of the IEs/IE groups containing the erroneous values.

#### Class 1:

Where the logical error occurs in a request message of a class 1 procedure, and the procedure has a message to report this unsuccessful outcome, this message shall be sent with an appropriate cause value.

Typical cause values are:

- Protocol Causes:
  - 1. Semantic Error
  - 2. Message not compatible with receiver state

Where the logical error is contained in a request message of a class 1 procedure, and the procedure does not have a message to report this unsuccessful outcome, the procedure shall be terminated and the ERROR INDICATION procedure shall be initiated with an appropriate cause value. The *Procedure ID* IE, the *Triggering Message* IE and the *Transaction ID* IE within the *Criticality Diagnostics* IE shall then be included in order to identify the message containing the logical error.

Where the logical error exists in a response message of a class 1 procedure, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.

#### Class 2:

Where the logical error occurs in a message of a class 2 procedure, the procedure shall be terminated and the ERROR INDICATION procedure shall be initiated with an appropriate cause value. The *Procedure ID* IE, the *Triggering* 

*Message* IE and the *Transaction ID* IE within the *Criticality Diagnostics* IE shall then be included in order to identify the message containing the logical error.

## 10.5 Exceptions

The error handling for all the cases described hereafter shall take precedence over any other error handling described in the other subclause of clause 10.

- If any type of error (Transfer Syntax Error, Abstract Syntax Error or Logical Error) is detected in the ERROR INDICATION message, it shall not trigger the Error Indication procedure in the receiving Node but local error handling.
- In case a response message or ERROR INDICATION message needs to be returned, but the information necessary to determine the receiver of that message is missing, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.
- If an error that terminates a procedure occurs, the returned cause value shall reflect the error that caused the termination of the procedure even if one or more abstract syntax errors with criticality 'ignore and notify' have earlier occurred within the same procedure.

## Annex A (normative):

## Allocation and Pre-emption of Radio Links in the Node B

## A.1 Deriving Allocation Information for a Radio Link

#### A.1.1 Establishment of a New Radio Link

The Allocation Information for a Radio Link in the case of establishment of a new Radio Link shall be derived as follows:

- The latest received Allocation/Retention Priority IE for each transport channel shall be used.

NOTE: The *Allocation/Retention Priority* IE for a transport channel may have been received in a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B or

- b) a procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels that are intended to use the Radio Link is set to 'no priority', the pre-emption capability of the Radio Link shall be set to 'shall not trigger pre-emption'.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels that are intended to use the Radio Link is not set to 'no priority', the allocation priority and the pre-emption capability of the Radio Link shall be set according to the following:
  - The transport channels that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to 'no priority' shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link.
  - The allocation priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all non excluded transport channels that are intended to use the Radio Link.
  - If all non-excluded transport channels that are intended to use a Radio Link to be established have the preemption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to 'shall not trigger pre-emption', the pre-emption capability of the Radio Link shall be set to 'shall not trigger pre-emption'.

If one or more non-excluded transport channels that are intended to use the Radio Link to be established have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to 'may trigger pre-emption', the pre-emption capability of the Radio Link shall be set to 'may trigger pre-emption'.

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

## A.1.2 Modification of an Existing Radio Link

The Allocation Information for a Radio Link in the case of modification of a Radio Link (addition or modification of transport channels using the Radio Link) shall be derived as follows:

- The latest received Allocation/Retention Priority IE for each transport channel shall be used.

NOTE: The *Allocation/Retention Priority* IE for a transport channel may have been received in a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B.

b) a previous procedure adding or modifying the transport channel, or

c) the current procedure adding or modifying the transport channel.

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels to be added or modified in the Radio Link is set to 'no priority', the pre-emption capability of the Radio Link to be modified shall be set to 'shall not trigger pre-emption'.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels to be added or modified in the Radio Link is not set to 'no priority', the allocation priority of and the pre-emption capability of the Radio Link to be modified shall be set according to the following:
  - The transport channels to be added or modified that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to 'no priority' shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link to be modified.
  - The allocation priority for a Radio Link to be modified shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all the non-excluded transport channels that are to be added or modified.
  - If all non-excluded transport channels that are to be added or modified in the Radio Link have the preemption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to 'shall not trigger pre-emption', the pre-emption capability of the Radio Link to be modified shall be set to 'shall not trigger pre-emption'.
    - If one or more of the non-excluded transport channels to be added or modified in the Radio Link have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to 'may trigger pre-emption', the pre-emption capability of the Radio Link to be modified shall be set to 'may trigger pre-emption'.

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

## A.2 Deriving Retention Information for a Radio Link

The Retention Information for an existing Radio Link shall be derived as follows:

- The latest received Allocation/Retention Priority IE for each transport channel shall be used.

NOTE: The *Allocation/Retention Priority* IE for a transport channel may have been received in a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B or

- b) a procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more transport channels using the Radio Link is set to 'no priority', the pre-emption vulnerability of the Radio Link shall be set to 'not pre-emptable'.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all the transport channels using the Radio Link is not set to 'no priority', the retention priority of the Radio Link and the pre-emption vulnerability of the Radio Link shall be set according to the following:
  - The retention priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all transport channels that uses the Radio Link.
  - If all transport channels that uses the Radio Link have the pre-emption vulnerability, given by the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE, set to 'pre-emptable', the pre-emption vulnerability of the Radio Link shall be set to 'pre-emptable'.

    If one or more transport channels that uses the Radio Link have the value of the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE set to 'not pre-emptable', the pre-emption vulnerability of the Radio Link shall be set to 'not pre-emptable'.

The derived retention priority and pre-emption vulnerability are valid until they are changed, or until the Radio Link is deleted. When new transport channels are added to or deleted from the Radio Link or when existing transport channels are modified with regards to the *Allocation/Retention Priority* IE, the retention information shall be derived again according to above.

#### A.3 The Allocation/Retention Process

The Node B shall establish or modify the resources for a Radio Link according to:

- The value of the Allocation Information (allocation priority and pre-emption capability) of the Radio Link to be established or modified. The Allocation Information is derived according to clause A.1.
- The value of the Retention Information (retention priority and pre-emption vulnerability) of existing Radio Links. The Retention Information derived according to clause A.2.
- The resource situation in the cell.

Whilst the process and the extent of the pre-emption functionality is operator dependent, the pre-emption indicators (pre-emption capability and pre-emption vulnerability) shall be treated as follows:

- -. If the pre-emption capability for a Radio Link to be established or modified is set to 'may trigger preemption' and the resource situation so requires, the Node B may trigger the pre-emption process in clause A.4 to free resources for this allocation request.
- -. If the pre-emption capability for a Radio Link to be established or modified is set to 'shall not trigger preemption', then this allocation request shall not trigger the pre-emption process in clause A.4.
- -. If the pre-emption vulnerability for an existing Radio Link is set to 'pre-emptable', then this Radio Link shall be included in the pre-emption process in clause A.4.
- -. If the pre-emption vulnerability for an existing Radio Link is set to 'not pre-emptable', then this Radio Link shall not be included in the pre-emption process in clause A.4.

## A.4 The Pre-emption Process

The pre-emption process shall only pre-empt Radio Links with lower retention priority than the allocation priority of the Radio Link to be established or modified. The Radio Links to be pre-empted shall be selected in ascending order of the retention priority.

When the pre-emption process detects that one or more Radio Links have to be pre-empted to free resources for a Radio Link(s) to be established or modified, the Node B shall initiate the Radio Link Pre-emption procedure for all the Node B Communication Contexts having Radio Links selected for pre-emption and start the  $T_{Preempt}$  timer.

When enough resources are freed to establish or modify the Radio Link(s) according to the request, the Node B shall stop the  $T_{Preempt}$  timer and complete the procedure that triggered the pre-emption process in accordance with the 'Successful Operation' subclause of the procedure.

If the T<sub>Preempt</sub> timer expires, the Node B shall regard the procedure that triggered the pre-emption process as failed and complete the procedure in accordance with the 'Unsuccessful Operation' subclause of the procedure.

# Annex B (informative): Measurement Reporting

When the *Report Characteristics* IE is set to 'Event A' (figure B.1), the Measurement Reporting procedure is initiated when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

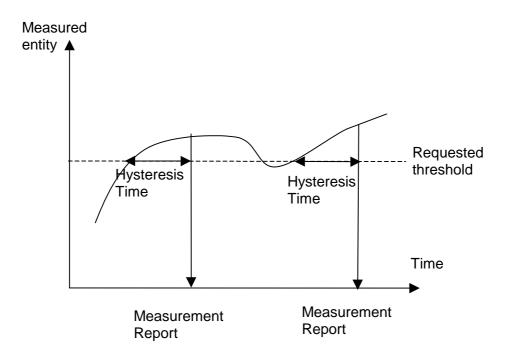


Figure B.1: Event A reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to 'Event B' (figure B.2), the Measurement Reporting procedure is initiated when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

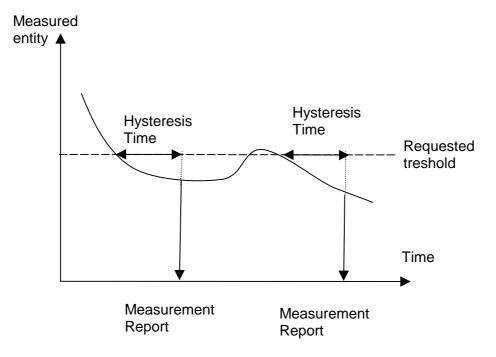


Figure B.2: Event B reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to 'Event C' (figure B.3), the Measurement Reporting procedure is initiated always when the measured entity rises by an amount greater than the requested threshold within the requested time. The reporting in figure B.3 is initiated if the Rising Time T1 is less than the requested time.

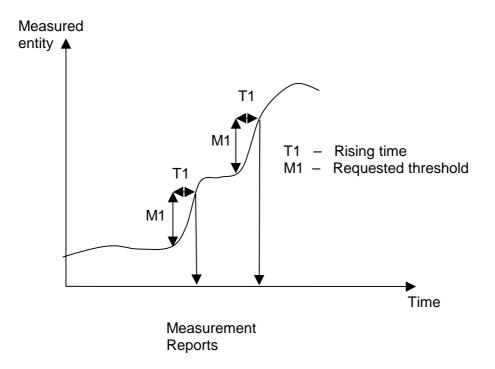


Figure B.3: Event C reporting

When the *Report Characteristics* IE is set to 'Event D' (figure B.4), the Measurement Reporting procedure is initiated always when the measured entity falls by an amount greater than the requested threshold within the requested time. The reporting in figure B.4 is initiated if the Falling Time T1 is less than the requested time.

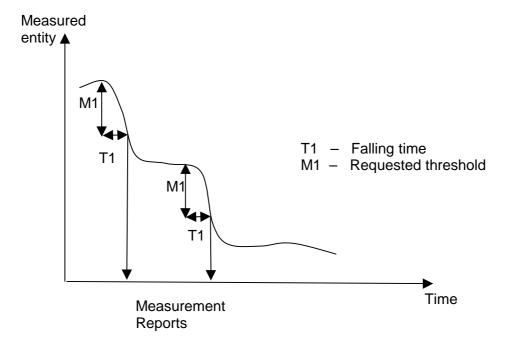


Figure B.4: Event D reporting

When the *Report Characteristics* IE is set to 'Event E' (figure B.5), the Measurement Reporting procedure (Report A) is initiated always when the measured entity rises above the "Measurement Threshold 1" and stays there for the "Measurement Hysteresis Time" (T1 in figure B.5). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity falls below the "Measurement Threshold 1" and is terminated by the Report B.

When the Report A conditions have been met and the measured entity falls below the "Measurement Threshold 2" and stays there for the "Measurement Hysteresis Time" (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

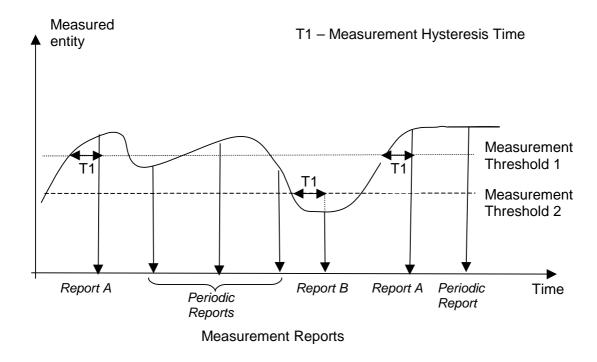
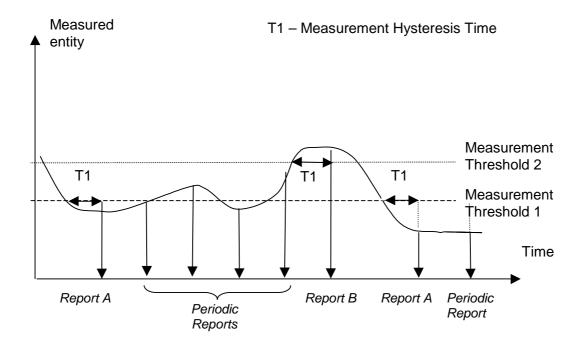


Figure B.5: Event E reporting with Hysteresis Time specified and Periodic Reporting requested

When the *Report Characteristics* IE is set to 'Event F' (figure B.6), the Measurement Reporting procedure (Report A) is initiated always when the measured entity falls below the "Measurement Threshold 1" and stays there for the "Measurement Hysteresis Time" (T1 in figure B.6). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity rises above the "Measurement Threshold 1" and is terminated by the Report B.

When the Report A conditions have been met and the measured entity rises above the "Measurement Threshold 2" and stays there for the "Measurement Hysteresis Time" (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.



Measurement Reports

Figure B.6: Event F reporting with Hysteresis Time specified and Periodic Reporting requested

## Annex C (informative): Guidelines for Usage of the Criticality Diagnostics IE

## C.1 EXAMPLE MESSAGE Layout

Assume the following message format:

IE/Group Name	Presence	Range	IE Type and Referenc e	Semantics Description	Criticality	Assigned Criticality
Message Type	М				YES	reject
Transaction ID	М				_	,
Α	M				YES	reject
В	M				YES	reject
>E		1 <maxe></maxe>			EACH	ignore
>>F		1 <maxf></maxf>			_	
>>>G		03,			EACH	ignore
>>H		1 <maxh></maxh>			EACH	ignore
>>>G		03,			EACH	ignore and notify
>>G	M				YES	reject
>>J		1 <maxj></maxj>			_	
>>>G		03,			EACH	reject
С	M				YES	reject
>K		1 <maxk></maxk>		_	EACH	ignore and notify
>>L		1 <maxl></maxl>			_	
>>>M	0				_	
D	M				YES	reject

NOTE 1: The IEs F, J, and L do not have assigned criticality. The IEs F, J, and L are consequently realised as the ASN.1 type SEQUENCE OF of 'ordinary' ASN.1 type, e.g. INTEGER. On the other hand, the repeatable IEs with assigned criticality are realised as the ASN.1 type SEQUENCE OF of an IE object, e.g. ProtocolIE-Single-Container.

For the corresponding ASN.1 layout, see subclause C.4.

## C.2 Example on a Received EXAMPLE MESSAGE

Assume further more that a received message based on the above tabular format is according to the figure below.

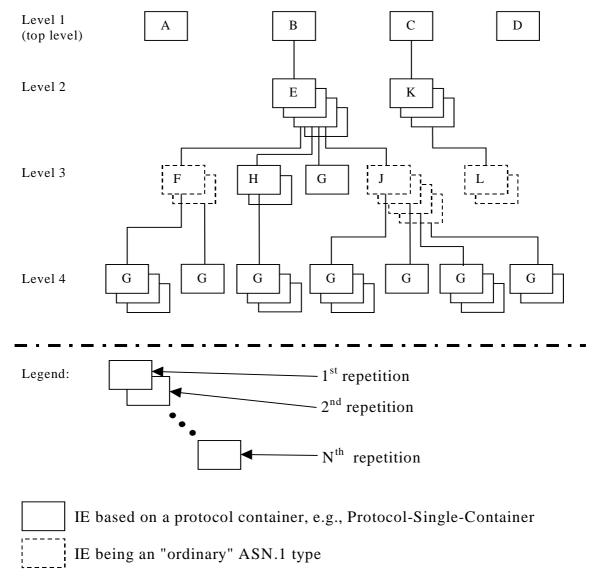
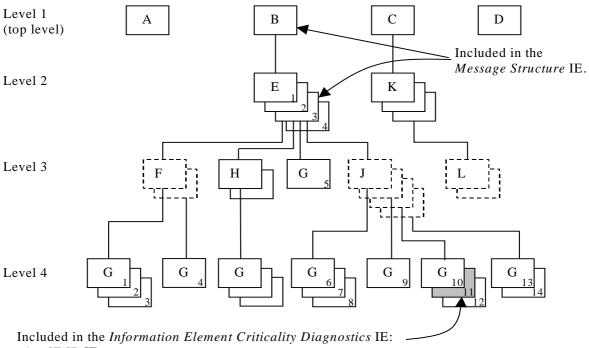


Figure C.1: Example of content of a received NBAP message based on the EXAMPLE MESSAGE

## C.3 Content of Criticality Diagnostics

### C.3.1 Example 1



- a) IE ID IE
- b) Repetition Number IE

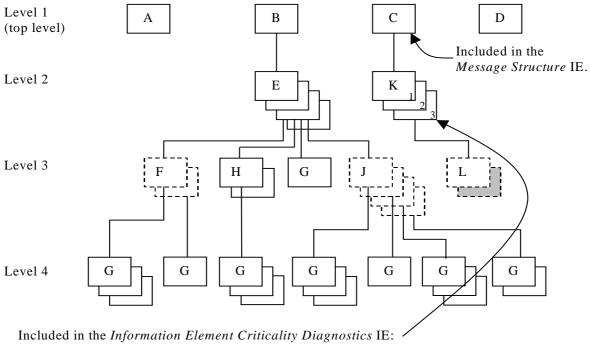
Figure C.2: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE J shown in the figure C.2 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment	
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.	
IE ID	id-G	IE ID from the reported level, i.e. level 4.	
Repetition	11	Repetition number on the reported level, i.e. level 4.	
Number		(Since the IE E (level 2) is the lowest level included in the Message Structure IE this is	
		the eleventh occurrence of IE G within the IE E (level 2).	
Type of Error	not		
	underst		
	ood		
Message Structur	e, first repe	etition	
>IE ID	id-B	IE ID from level 1.	
Message Structur	Message Structure, second repetition		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.	
>Repetition	3	Repetition number from the lowest level above the reported level, i.e. level 2.	
Number			

- NOTE 2: The IE J on level 3 cannot be included in the *Message Structure* IE since they have no criticality of their own.
- NOTE 3: The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

### C.3.2 Example 2



- a) IE ID IE
- b) Repetition Number IE

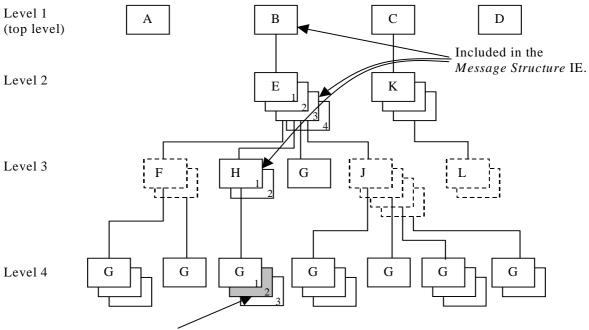
Figure C.3: Example of a received NBAP message containing a not comprehended IE

If there is an error within the second instance (marked as grey) in the sequence (IE L in the tabular format) on level 3 below IE K in the structure shown in the figure C.3 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment	
IE Criticality	ignore and notify	Criticality for IE on the reported level, i.e. level 2.	
IE ID	id-K	IE ID from the reported level, i.e. level 2.	
Repetition Number	3	Repetition number on the reported level, i.e. level 2.	
Type of Error	not underst ood		
Message Structu	re, first rep	etition	•
>IE ID	id-C	IE ID from the lowest level above the reported level, i.e. level 1.	•

NOTE 4: The IE L on level 3 cannot be reported individually included in the *Message Structure* IE since it has no criticality of its own.

## C.3.3 Example 3



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

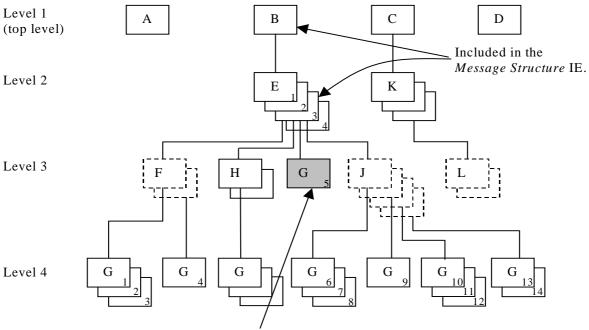
Figure C.4: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE H shown in the figure C.4 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	ignore	Criticality for IE on the reported level, i.e. level 4.
	and	
	notify	
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition	2	Repetition number on the reported level, i.e. level 4.
Number		
Type of Error	not	
	underst	
	ood	
Message Structur	e, first repe	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	e, second	repetition
>IE ID	id-E	IE ID from level 2.
>Repetition	3	Repetition number from level 2.
Number		
Message Structur	e, third rep	etition
>IE ID	id-H	IE ID from the lowest level above the reported level, i.e. level 3.
>Repetition	1	Repetition number from the lowest level above the reported level, i.e. level 3.
Number		

NOTE 5: The repetition number of level 4 indicates the number of repetitions of IE G received up to the detected erroneous repetition, counted below the same instance of the previous level with assigned criticality (instance 1 of IE H on level 3).

### C.3.4 Example 4



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

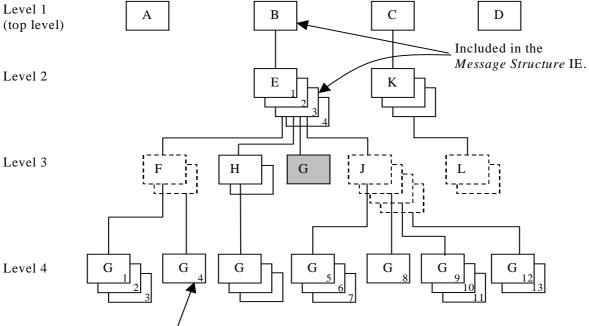
Figure C.5: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE E shown in the figure C.5 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition	5	Repetition number on the reported level, i.e. level 3.
Number		(Since the IE E (level 2) is the lowest level included in the Message Structure IE this is
		the fifth occurrence of IE G within the IE E (level 2).
Type of Error	not	
	underst	
	ood	
Message Structu	ire, first rep	etition
>IE ID	id-B	IE ID from level 1.
Message Structu	ire, second	repetition
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition	3	Repetition number from the lowest level above the reported level, i.e. level 2.
Number		

NOTE 6: The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

### C.3.5 Example 5



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

Figure C.6: Example of a received NBAP message with a missing IE

If the instance marked as grey in the IE G in the IE E shown in the figure C.6 above, is missing this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment	
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.	
IE ID	id-G	IE ID from the reported level, i.e. level 3.	
Repetition Number	4	Repetition number up to the missing IE on the reported level, i.e. level 3. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE there have been four occurrences of IE G within the IE E (level 2) up to the missing occurrence.	
Type of Error	missing		
Message Structur	e, first repe	etition	
>IE ID	id-B	IE ID from level 1.	
Message Structur	Message Structure, second repetition		
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.	
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.	

NOTE 7: The repetition number of the reported IE indicates the number of repetitions of IE G received up to but not including the missing occurrence, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

#### C.4 ASN.1 of EXAMPLE MESSAGE

```
ExampleMessage ::= SEQUENCE {
                        ProtocolIE-Container
    ProtocolIEs
                                                           {{ExampleMessage-Ies}},
    ProtocolExtensions ProtocolExtensionContainer {{ExampleMessage-Extensions}}
                                                                                               OPTIONAL.
}
ExampleMessage-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-A CRITICALITY reject TYPE A PRESENCE mandatory} | { ID id-B CRITICALITY reject TYPE B PRESENCE mandatory} | { ID id-C CRITICALITY reject TYPE C PRESENCE mandatory} | { ID id-D CRITICALITY reject TYPE D PRESENCE mandatory} ,
}
B ::= SEQUENCE {
                      E-List,
    \verb|iE-Extensions| & ProtocolExtensionContainer { {B-ExtIEs}} & OPTIONAL, \\
B-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-List ::= SEQUENCE (SIZE (1..maxE)) OF ProtocolIE-Single-Container { {E-Ies} }
E-Ies NBAP-PROTOCOL-IES ::= {
   { ID id-E CRITICALITY ignore TYPE E PRESENCE mandatory }
E ::= SEQUENCE {
    h
                      H-List,
    q
                      G-List1.
                      J-List,
    iE-Extensions ProtocolExtensionContainer { {E-ExtIEs} } OPTIONAL,
}
E-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
F-List ::= SEQUENCE (SIZE (1..maxF)) OF F
F ::= SEQUENCE {
                      G-List2 OPTIONAL.
    iE-Extensions ProtocolExtensionContainer { {F-ExtIEs} } OPTIONAL,
          NBAP-PROTOCOL-EXTENSION ::= {
F-ExtIEs
 \mbox{G-List2} ::= \mbox{SEQUENCE (SIZE (1...3, ...)) OF Protocolle-Single-Container } \{ \mbox{ } \{\mbox{G2-IEs} \} \mbox{ } \} 
G2-Ies NBAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY ignore TYPE G PRESENCE mandatory }
H-List ::= SEQUENCE (SIZE (1..maxH)) OF ProtocolIE-Single-Container { {H-IEs} }
H-Ies NBAP-PROTOCOL-IES ::= {
    { ID id-H CRITICALITY ignore TYPE H PRESENCE mandatory }
H ::= SEQUENCE {
                      G-List3 OPTIONAL,
                                         ProtocolExtensionContainer { {H-ExtIEs} } OPTIONAL,
    iE-Extensions
H-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
G-List3 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G3-IEs} }
G3-Ies NBAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY notify TYPE G PRESENCE mandatory }
G-List1 ::= ProtocolIE-Single-Container { {G1-IEs} }
G1-IES NBAP-PROTOCOL-IES ::= {
   J-List ::= SEQUENCE (SIZE (1..maxJ)) OF J
J ::= SEQUENCE {
                  G-List4 OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {J-ExtIEs} } OPTIONAL,
J-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
G-List4 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { G4-IEs} }
G4-Ies NBAP-PROTOCOL-IES ::= {
  { ID id-G CRITICALITY reject TYPE G PRESENCE mandatory }
C ::= SEQUENCE {
   k
                  K-List,
   iE-Extensions ProtocolExtensionContainer { {C-ExtIEs} } OPTIONAL,
C-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
K-List ::= SEQUENCE (SIZE (1..maxK)) OF ProtocolIE-Single-Container { {K-IEs} }
K-Ies NBAP-PROTOCOL-IES ::= {
   { ID id-K CRITICALITY notify TYPE K PRESENCE mandatory }
K ::= SEQUENCE {
                  L-List,
   iE-Extensions ProtocolExtensionContainer { {K-ExtIEs} } OPTIONAL,
K-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
L-List ::= SEQUENCE (SIZE (1..maxL)) OF L
L ::= SEQUENCE {
                  M OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {L-ExtIEs} } OPTIONAL,
L-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ExampleMessage-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

# Annex D (normative): IB\_SG\_DATA Encoding

## D.1 Overall Description

There exist two variants for encoding *IB\_SG\_DATA* IE (see section 9.2.1.32), which are detailed in subsections below. To avoid incorrect transmission of System Information on Uu, the following behaviour is required:

- For each Iub, CRNC shall use the encoding variant supported by the Node B for the *IB\_SG\_DATA* IE (see section 9.2.1.32) when sending the SYSTEM INFORMATION UPDATE REQUEST message to the Node B. This is supported by configuration in the CRNC.

## D.2 IB\_SG\_DATA Encoding Variant 1

This variant corresponds to the algorithm, that ASN.1 length encoding for the conveyed SIB segment is performed by the RNC. Building of IB\_SG\_DATA segments involves two steps:

- 1) Segmentation of MIB/SIB/SB and
- 2) RRC encoding of the segments, which includes the PER encoding of the length in case of 'SIB data variable'.

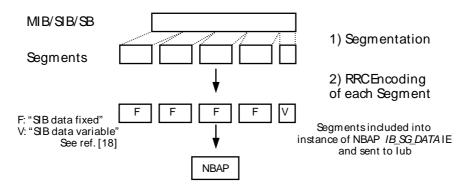


Figure D.1: The Building of Segments

## D.3 IB\_SG\_DATA Encoding Variant 2

This variant corresponds to the algorithm, that ASN.1 length encoding for the conveyed segment is not performed by the RNC. Segments are built in the CRNC by segmentation of a MIB/SIB/SB.

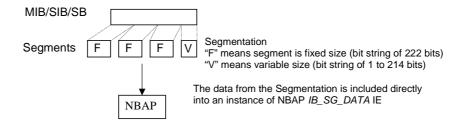


Figure D.2: The Building of Segments

## Annex E (informative): Reporting the status of resources used for frequency (1.28 Mcps TDD only)

For a multi-frequency cell, the Local Cell represents the resources in the Node B that can be used for the configuration of a number of frequencies in the cell. The resources for a frequency in Node B are defined as FPM (Frequency Process Module) and is identified by FPM ID.

In the Cell Setup procedure, RNC should configure FPM for each frequency by including *FPM ID* IE in the CELL SETUP REQUEST message.

In the Cell Reconfiguration procedure, RNC should configure FPM for each added frequency by including *FPM ID* IE in the CELL RECONFIGURATION REQUEST message.

In Audit procedure, the Node B should include the *FPM* ID IE and the *Local Cell ID* IE in the *Local Cell Information* IE to report the status of a FPM in the AUDIT RESPONSE message.

In Resource Status Indication procedure, the Node B should include the *FPM ID* IE and the *Local Cell ID* IE in the *Local Cell Information* IE to report the status of a FPM in the RESOURCE STATUS INDICATION message.

# Annex F (informative): Change History

TSG#	TSG Doc.	CR	Rev	Subject/Comment	New
03/2008	-	-	-	Creation of Rel-8 version baswed on 7.8.0	8.0.0
39	RP-080083	1457	1	Introduction of Improved L2 for Uplink	8.0.0
39	RP-080084	1460	2	Inclusion of Cell Id into common measurement report	8.0.0
40	RP-080307	1464		Introduction of LCR TDD 64QAM in NBAP	8.1.0
40	RP-080404	1466	2	Mechanism for Scheduling Information transmission on MAC-e PDU alone for 1.28 Mcps TDD in EUL	8.1.0
40	RP-080295	1470	1	Modification of E-HICH Time Offset configuration for LCR TDD	8.1.0
40	RP-080295		1	Extended power control gap for E-PUCH in LCR TDD	8.1.0
40	RP-080296	1478	1	Support of octet aligned HS-DSCH transport block sizes for non-64QAM	8.1.0
40	RP-080298	1480		Power Control Gap IE handling	8.1.0
40	RP-080299	1483	2	RL Parameter Update for E-DCH FDD DL Control Channel Information	8.1.0
40	RP-080298	1485	1	Clarification on Transport Bearer Not Requested Indicator	8.1.0
40	RP-080298	1489		ASN.1 and tabular misalignment	8.1.0
40	RP-080294	1497	1	Use of UL DPDCH Indicator For E-DCH Operation IE for unsynchronised RL reconfiguration	8.1.0
40	RP-080300	1499	1	GANSS Corrections	8.1.0
40	RP-080308	1500		introduction of feature indicator	8.1.0
41	RP-080576	1504		Extension of the ranges of the HS-DSCH / E-DCH Provided Bit Rate Value IEs	8.2.0
41	RP-080576	1506	1	COMMON TRANSPORT CHANNEL SETUP REQUEST TDD message ASN correction	8.2.0
41	RP-080580	1508	1	Correct ASN.1 compatibility problem in PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message for 1.28Mcps TDD	8.2.0
41	RP-080576	1512	2	Addition of 16QAM AG table choice IE	8.2.0
41	RP-080576		2	Adding abnormal conditions to Continuous Packet Connectivity	8.2.0
41	RP-080577	1523		DRX-DTX and F-DPCH	8.2.0
41	RP-080578	1528		Description of Priority Queue ID for Enhanced Cell_FACH	8.2.0
41	RP-080578	1530	1	Removing the ambiguity in HS-DSCH Common System Information description	8.2.0
41	RP-080580	1532		Some minor description corrections for E-DCH in LCR TDD	8.2.0
41	RP-080579			Correction of SixtyfourQAM-DL-UsageIndicator	8.2.0
41	RP-080580	1534	2	Add Additional Time Slot LCR IE in common measuement messages	8.2.0
41	RP-080587	1539	2	Introduction of Enhanced Uplink in Cell_FACH	8.2.0
41	RP-080588		1	Introduction of Enhanced UE DRX	8.2.0
41	RP-080576			Correction on Enhanced Cell_FACH/Cell_PCH	8.2.0
42	RP-080848	1544		Inter-RAT Mobility to/from E-UTRAN	8.3.0
42		1545	3	New NBAP Measurement on Common E-DCH Resource Usage	8.3.0
42	RP-080852	1547	1	Support for additional navigation satellite systems in NBAP	8.3.0
42	RP-080838		1	Indication of E-DPCCH Power Boosting capability	8.3.0
42	RP-080842		1	Indication of Combination of 64QAM and MIMO	8.3.0
42		1557		Some corrections for common E-DCH	8.3.0
42 42	RP-080858 RP-080850	1558 1561	2	Adding Common E-DCH implicit release indicator IE into NBAP message Introduction of the Enhanced CELL_FACH, CELL_PCH, URA_PCH state for 1.28Mcps	8.3.0 8.3.0
			2	TDD	
42	RP-080838		1	Correction of power control gap for 1.28Mcps TDD	8.3.0
42	RP-080858		1	E-RNTI in RL Setup Request	8.3.0
42	RP-080838			Correction on Usage for Transport Bearer Not Requested Indicator	8.3.0
42	RP-080851		2	Introduction of HS-DSCH Serving Cell Change Enhancements	8.3.0
42	RP-080853	1569	1	Introduction of Dual Carrier	8.3.0
42	RP-080855		1	Improved EUL power control at UE power limitation Support of IMB	8.3.0
42 43		1571	1	Minor corrections from NBAP review	8.3.0
43	RP-090077	1572 1574		Addition of MBR Parameter for 1.28Mcps TDD Enhanced Uplink	8.4.0 8.4.0
43	RP-090075 RP-090092	1575	2	Introduction of Continuous Packet Connectivity in NBAP for LCR TDD	8.4.0
43	RP-090092	1577	2	Addition of Multi-carrier HS-DSCH physical layer category for 1.28Mcps TDD	8.4.0
43	RP-090074	1578	1	NBAP Support of measurements on E-UTRAN	8.4.0
43	RP-090240	1580	<del>                                     </del>	Addition of MAC-hs Reset Indicator IE into RADIO LINK ADDITION FAILURE message	8.4.0
43	RP-090072	1583		Clarification of the relation between HS-SCCH less HS-PDSCH second code and first	8.4.0
				code	
43	RP-090078	1585	1	Various GANSS Corrections to NBAP	8.4.0
43	RP-090095			NBAP Dual Carrier corrections	8.4.0
43	RP-090077	1588	1	Correction for IMB	8.4.0
43	RP-090094	1593	1	Introduction of MIMO for 1.28Mcps TDD	8.4.0
43	RP-090075	1595	3	Enhancement of MBMS reception with simultanneous HSDPA for 1.28Mcps TDD	8.4.0
43	RP-090079	1596	2	Clean up: FDD Enhanced Uplink in Cell_FACH	8.4.0
43	RP-090079	1597	2	HS-DPCCH Capability for Enhanced Uplink in Cell_FACH	8.4.0
43	RP-090077	1598		Clean up: FDD Enhanced UE DRX	8.4.0

142	DD 000070	1000	10	Information for Fixed and Florible DLC DDLL -:	0.4.0
43 43	RP-090079 RP-090077	1600 1604	2	Information for Fixed and Flexible RLC PDU size  Corrections related to enhanced HS-DSCH serving cell change	8.4.0 8.4.0
43	RP-090077	1603		Some Corrections for Dual Carrier HSDPA	8.4.0
44		1613		Correction of formatting in NBAP	8.5.0
44	RP-090638	1605	1	Corrections to the modification of MIMO reference signal for 1.28 Mcps TDD	8.5.0
44	RP-090638	1608		Further abnormal conditions for IP Transport Option	8.5.0
44	RP-090638	1609	1	Partial Failure for DC-HSDPA	8.5.0
44	RP-090638	1610	3	Corrections of CPC DRX configuration for 1.28Mcps TDD	8.5.0
44	RP-090631	1615		Improved CM checks for F-DPCH	8.5.0
44	RP-090631	1621	1	Addition of UL 16QAM credit consumption in E-DCH Capacity Consumption Law	8.5.0
44	RP-090631	1619	1	Clarification of E-AGCH Table Choice	8.5.0
44 44	RP-090635 RP-090635	1622		Clarification on Uplink L2 improvement  Addition of description for Fixed and Flexible RLC PDU operation for TDD	8.5.0 8.5.0
44	RP-090635	1632 1623	1	Removal of HS-PDSCH Code Change indicator IE from RADIO LINK PARAMETER	8.5.0
44		1023	'	UPDATE INDICATION message	0.3.0
44	RP-090634	1625		Correction of abnormal condition for RL Addition Request	8.5.0
44	RP-090634	1628		Removal of DC-HSDPA limitation from NBAP	8.5.0
44	RP-090634	1631	1	Addition of SPI IE in Common E-DCH System Information LCR IE	8.5.0
44 44	RP-090633	1624		ASN.1 correction for MAC-hs Reset Indicator	8.5.0 8.5.0
44	RP-090633 RP-090630	1626 1630	1	Include a general HS-SCCH support indicator  Correction of the value range of MAC PDU Size Extended IE NBAP	8.5.0
45	RP-090030	1635	'	Correction of the value range of MAC PDO Size Extended IE NBAP	8.6.0
45	RP-090780	1642	1	Corrections to the common measurement for 1.28Mcps TDD	8.6.0
45	RP-090770	1643	1	Correction on <i>E-DCH FDD Information</i> abnormal condition in radio link reconfiguration	8.6.0
				procedure	
45	RP-090770	1644	1	Clarification on E-DCH related resources assignment in Physical Shared Channel Reconfiguration procedure	8.6.0
45	RP-090770	1645	1	Addition of abnormal condition for HS-DSCH/E-DCH in RL Addition procedure	8.6.0
45	RP-090769	1656		Addition of Semantics Description for E-DCH RACH Report Information in Common Measurement Value	8.6.0
45	RP-090770	1657	1	Semantics Description of IB_OC_ID	8.6.0
45	RP-090769	1661	2	Clarification for Power Resource Related Info in TDD non-scheduled grant info	8.6.0
45	RP-090770	1663	2	Enhanced HS-SCCH support optional in Rel8	8.6.0
45	RP-090769	1664	1	Corrections related to UE Status Update procedure	8.6.0
45	RP-090770	1665		Addition of casue SixtyfourQAM DL and MIMO Combined not available in ASN.1	8.6.0
45	RP-090770	1666	1	Inclusion of UE Support Indicator Extension IE into RL handling	8.6.0
45	RP-090845	1670		Rel-8 NBAP Support for Signaling of S-CPICH power offset and DL Control Channel TX Diversity for MIMO Ues	8.6.0
46	RP-091178	1675		Correction to ASN.1 for MiMO Power offset	8.7.0
46	RP-091181	1677		Clarification of DPC mode configuration for common E-DCH	8.7.0
46	RP-091180	1699		Correction of an error in the HS-DSCH Common System Information LCR IE	8.7.0
46	RP-091180	1703		Clarification of Priority Queue ID for Ehanced CELL_FACH for 1.28Mcps TDD	8.7.0
46	RP-091182	1715		Further Corrections for DC-HSDPA	8.7.0
46	RP-091181	1717	ļ	Introduction of E-RNTI in RL Information in RL Setup Request	8.7.0
46	RP-091181			Application of MAC-e Reset Indicator for MAC-i Reset	8.7.0
46	RP-091182		1	Correction of abnormal conditions for Dual cell HS-DSCH in RL Addition procedure	8.7.0
46 46	RP-091180 RP-091180	1697 1701	1	Clarifiction of several IEs names for 1.28 Mcps TDD  Correction of HARQ Memory Partitioning configuration in Enhanced Cell_FACH Operation	8.7.0 8.7.0
			<u> </u>	for 1.28 Mcps TDD	
46	RP-091179	1730		Correction on IE 'E-AGCH Table Choice'	8.7.0
46	RP-091180	1695	1	Addition of ans.1 definition for the E-DCH Semi-Persistent Resource Reservation Indicator IE	8.7.0
46	RP-091180	1687	2	Correction on ASN.1 errors in IE Common E-DCH System Information Response LCR for 1.28Mcps TDD	8.7.0
46	RP-091180	1689	2	Correction on the SPS resource configuration for 1.28Mcps TDD	8.7.0
46	RP-091179	1722	2	STTD is cell specific in Dual-Cell HSDPA	8.7.0
46	1 551175	† · · · · · ·	1	Table of contents updated	8.7.1
47	RP-100215	1735	1	Allow reconfiguration of some les in RL Addition procedure	8.8.0
47	RP-100216	1737	2	Correction of E-DCH RACH Report	8.8.0
47	RP-100219	1739	2	E-RNTI Allocation for UE moves to Cell_FACH from Cell_DCH	8.8.0
47	RP-100217	1740	1	Clarification of HS-DSCH Paging System Information LCR	8.8.0
47	RP-100217	1742	2	Addition of power control and synchronization control configurations for enhanced	8.8.0
47	DD 100015	4741		CELL_FACH for 1.28Mcps TDD	0.0.0
47 47	RP-100217	1744	2	Correction of description for RSI procedure for 1.28Mcps TDD	8.8.0
	RP-100218	1746	1	Correction for the description of E-DCH serving radio link IE for E-DCH semi-persistent operation	8.8.0
47		1748	1	Correction of the presence of Sixtyfour QAM DL and MIMO Combined Capability IE	8.8.0
		14750	1	A missing IE in ASN.1 for 1.28 Mcps TDD	8.8.0
47	RP-100218	1750			
		1755	2	Correction on the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE for 1.28Mcps TDD	8.8.0
47				Correction on the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE for	

47	RP-100218	1771	1	Syncronization detection window configuration in CPC for 1.28 Mcps TDD	8.8.0
47	RP-100217	1773	1	Addition of Physical Channel ID in the common E-RNTI configuration for 1.28 Mcps TDD	8.8.0
47	RP-100219	1779	1	Addition of F-DPCH TX Power info in Common E-DCH System Information	8.8.0
47	RP-100219	1784	3	Removal of procedural text for DPC Mode IE in Common E-DCH System Information	8.8.0
47	RP-100216	1786		Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change	8.8.0
47	RP-100199	1789		Indication of Precoding Weight Set Restriction preference	8.8.0
47	RP-100216	1793		Correction of common E-DCH mac-d flow for CCCH transmission	8.8.0
48	RP-100593	1760	3	Correction to state transition of Enhanced CELL_FACH UE for LCR TDD	8.9.0
48	RP-100593	1803	1	Clarification on the usage of Treset for 1.28 Mcps TDD	8.9.0
48	RP-100593	1809		Correction of procedure text that appears to be duplicated and mis-placed	8.9.0
48	RP-100592	1817		CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure	8.9.0
48	RP-100545	1819	1	Correction for Enhanced Serving Cell Change	8.9.0
49	RP-100904	1821		Incorrect message reference	8.10.0
49	RP-100904	1824	1	Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change	8.10.0
49	RP-100905	1832		Correction of procedure text for E-DCH SPS operation	8.10.0
49	RP-100905	1838	2	Corrections to the mismatch between tabular and ASN.1 for E-FACH 1.28Mcps TDD	8.10.0
49	RP-100905	1840	2	Corrections to the range of Enabling Delay for CPC 1.28Mcps TDD	8.10.0
50	RP-101269	1849		Corrections to E-DCH MAC-d Flow Multiplexing for 1.28Mcps TDD	8.11.0
50	RP-101269	1852	1	Correction of Inactivity Threshold for UE DRX Cycle for 1.28Mcps TDD	8.11.0
00	101200	1002		Concedient of midelivity Threehold for GE Brix Cycle for 1.26Meps 122	0.11.0

## History

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