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# Foreword

This Technical Specification (TS) has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP).

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### 1 Scope

The present document specifies the radio network layer signalling procedures of the control plane between RNCs in UTRAN, between RNC in UTRAN and BSS in GERAN Iu mode and between BSSs in GERAN Iu mode.

# 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 23.003: "Numbering, addressing and identification".
- [2] 3GPP TS 25.413: "UTRAN Iu Interface RANAP Signalling".
- [3] 3GPP TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Layer Signalling for DCH Data Streams".
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- [8] 3GPP TS 25.211: "Physical Channels and Mapping of Transport Channels onto Physical Channels (FDD)".
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- [18] ITU-T Recommendation X.680 (2002-07): "Information technology Abstract Syntax Notation One (ASN.1): Specification of basic notation".
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[36]	3GPP TS 44.118: "Mobile radio interface layer 3 specification; Radio Resource Control (RRC) Protocol Iu mode".
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- [65] 3GPP TS 23.195: "Provision of UE Specific Behaviour Information to Network Entities".
- [66] 3GPP TS 24.008: "Mobile radio interface Layer 3 specification; Core network protocols; Stage 3".
- [67] 3GPP TS 44.108: "Mobile radio interface layer 3 specification; Radio Resource Control (RRC) protocol".
- [68] 3GPP TS 25.422: "UTRAN Iur interface signalling transport".
- [69] 3GPP TS 45.005: "Technical Specification Group GSM/EDGE Radio Access Network; Radio transmission and reception"

# 3 Definitions, Symbols and Abbreviations

### 3.1 Definitions

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

**Elementary Procedure:** RNSAP protocol consists of Elementary Procedures (Eps). An Elementary Procedure is a unit of interaction between two RNCs. 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.

**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 UE Context still exists.

**UE Context:** The UE Context contains the necessary information for the DRNC/DBSS to communicate with a specific UE. The UE Context is created by the Radio Link Setup procedure or by the Uplink Signalling Transfer procedure when the UE makes its first access in a cell controlled by the DRNS/DBSS or by Enhanced Relocation procedure when the procedure is the first dedicated RNSAP procedure for the UE. The UE Context is deleted by the Radio Link Deletion procedure, by the Common Transport Channel Resources Release procedure, or by the Downlink Signalling Transfer procedure when neither any Radio Links nor any common transport channels are established towards the concerned UE. The UE Context is identified by the SCCP Connection for messages using connection oriented mode of the signalling bearer and the D-RNTI for messages using connectionless mode of the signalling bearer, unless specified otherwise in the procedure text.

**Distant RNC Context:** The Distant RNC context is created by the first Common Measurement Initiation Procedure or Information Exchange Initiation Procedure initiated by one RNC/BSS and requested from another RNC/BSS. The Distant RNC Context is deleted after the Common Measurement Termination, the Common Measurement Failure, the Information Exchange Termination or the Information Exchange Failure procedure when there is no more Common Measurement and no more Information to be provided by the requested RNC/BSS to the requesting RNC/BSS. The Distant RNC Context is identified by a connection oriented signalling bearer (See TS 25.422 [68]) as, for common measurements and information exchange, only the connection oriented mode of the signalling bearer is used.

**Signalling radio bearer 2:** The signalling radio bearer 2 is used by the UE to access a GERAN cell in order to perform RRC procedures (TS 44.118 [36]).

UE Link: see definition in TS 25.346 [50].

**URA Link:** see definition in TS 25.346 [50].

MBMS Bearer Service: see definition in TS 23.246 [51].

MBMS session: see definition in TS 25.346 [50].

MBMS session start: see definition in TS 25.346 [50].

MBMS session stop: see definition in TS 25.346 [50].

MBMS Selected Services: see definition in TS 25.346 [50].

PUESBINE feature: as defined in TS 23.195 [65].

### 3.2 Symbols

Void.

# 3.3 Abbreviations

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

A-GPS	Assisted-GPS
ALCAP	Access Link Control Application Part
APN	Access Point Name
ASN.1	
	Abstract Syntax Notation One Bit Error Pata
BER	Bit Error Rate
BLER	Block Error Rate
BSS	Base Station Subsystem
CBSS	Controlling BSS
CCCH	Common Control Channel
CCPCH	Common Control Physical Channel
CCTrCH	Coded Composite Transport Channel
CFN	Connection Frame Number
C-ID	Cell Identifier
CM	Compressed Mode
CN	Core Network
CPICH	Common Pilot Channel
CRNC	Controlling RNC
CLTD	Closed Loop Transmit Diversity
DBSS	Drift BSS
C-RNTI	Cell Radio Network Temporary Identifier
CS	Circuit Switched
CTFC	Calculated Transport Format Combination DCH Dedicated Channel
DGANSS	Differential GANSS
DGPS	Differential GPS
DL	Downlink
DPC	Downlink Power Control
DPCCH	Dedicated Physical Control Channel
DPCH	Dedicated Physical Channel
DPDCH	Dedicated Physical Data Channel
DRNC	Drift RNC
DRNS	Drift RNS
D-RNTI	Drift Radio Network Temporary Identifier
DRX	Discontinuous Reception
DSCH	Downlink Shared Channel
Ec	
E-AGCH	Energy in single Code E-DCH Absolute Grant Channel
E-DCH	Enhanced UL DCH
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)
E-UTRA	Evolved UTRA
EDSCHPC	Enhanced Downlink Shared Channel Power Control
EGNOS	European Geostationary Navigation Overlay Service
EP	Elementary Procedure
FACH	Forward Access Channel
FDD	Frequency Division Duplex
F-DPCH	Fractional DPCH
FN	Frame Number
FP	Frame Protocol
F-TPICH	Fractional Transmitted Precoding Indicator Channel
GANSS	Galileo and Additional Navigation Satellite Systems
GERAN	GSM EDGE Radio Access Network
GA	Geographical Area
GAGAN	GPS Aided Geo Augmented Navigation

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GAI	Geographical Area Identifier
GLONASS	GLObal'naya Navigatsionnaya Sputnikovaya Sistema (Engl.: Global Navigation Satellite System)
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
GRA	GERAN Registration Area
GSM	Global System Mobile
GWCN	Gateway Core Network
HSDPA	High Speed Downlink Packet Access
HW	Hardware
IB	Information Block
ICD	Interface Control Document
ID	Identity or Identifier
IE	Information Element
IMSI	International Mobile Subscriber Identity
IP	Internet Protocol
IPDL	Idle Period DownLink
ISCP	Interference Signal Code Power
LAC	Location Area Code
LCR	Low Chip Rate (1.28 Mcps)
LCS	Location Services
MAC	Medium Access Control
MBMS	Multimedia Broadcast Multicast Service
MDT	Minimization of Drive Tests
MOCN	Multi-Operator Core Network
MRNC	MBMS Master RNC
MS	Mobile Station
MSAS	Multi-functional Satellite Augmentation System
NACC	Network Assissted Cell Change
NAS	Non Access Stratum
No	Reference Noise
NRT	Non Real Time
O&M	Operation and Maintenance
P(-)CCPCH	Primary CCPCH
PCH	Paging Channel
OTD	Observed Time Difference
P(-)CPICH	Primary CPICH
PCS	Personal Communication Services
PDSCH	Physical Downlink Shared Channel
PDU	Protocol Data Unit
PhCH	Physical Channel
PICH	Paging Indication Channel
PLCCH	Physical Layer Common Control Channel
Pos	Position or Positioning
PRACH	Physical Random Access Channel
PTP	Point To Point
PTM	Point To Multipoint
PS	Packet Switched
PUESBINE	Provision of UE Specific Behaviour Information to Network Entities
QE	Quality Estimate
QZSS	Quasi-Zenith Satellite System
RAC	Routing Area Code
RACH	Random Access Channel
RAN	Radio Access Network
RANAP	Radio Access Network Application Part
RB	Radio Bearer
RL	Radio Link
RLC	Radio Link Control
RLS	Radio Link Set
RM	Rate Matching
RNC	Radio Network Controller
RNS	Radio Network Subsystem
RNSAP	Radio Network Subsystem Application Part
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RNTI	Radio Network Temporary Identifier
RRC	Radio Resource Control
RT	Real Time
RSCP	Received Signal Code Power
SBAS	Satellite Based Augmentation System
SBSS	Serving BSS
Rx	Receive or Reception
Sat	Satellite
SCCP	Signalling Connection Control Part
S(-)CCPCH	Secondary CCPCH
SCH	Synchronisation Channel
SCTD	Space Code Transmit Diversity
S-DPCCH	Secondary Dedicated Physical Control Channel
SDU	Service Data Unit
SF	System Frame
SFN	System Frame Number
SHCCH	Shared Control Channel
SIR	Signal-to-Interference Ratio
SNA	Shared Network Area
SRB2	Signalling radio bearer 2
SRNC	Serving RNC
SRNS	Serving RNS
S-RNTI	Serving Radio Network Temporary Identifier
STTD	Space Time Transmit Diversity
TDD	Time Division Duplex
TF	Transport Format
TFCI	Transport Format Combination Indicator
TFCS	Transport Format Combination Set
TFS	Transport Format Set
TGCFN	Transmission Gap Connection Frame Number
TMGI	Temporary Mobile Group Identity
ToAWE	Time of Arrival Window Endpoint
ToAWS	Time of Arrival Window Startpoint
TPC	Transmit Power Control
TrCH	Transport Channel
TS	Time Slot
TSG	Technical Specification Group
TSTD	Time Switched Transmit Diversity
TTI	Transmission Time Interval
TX	Transmit or Transmission
UARFCN	UTRA Absolute Radio Frequency Channel Number
UDP	User Datagram Protocol
UC-ID	UTRAN Cell Identifier
UE	User Equipment
UL	Uplink
UMTS	Universal Mobile Telecommunications System
URA	UTRAN Registration Area
U-RNTI	UTRAN Registration Area UTRAN Radio Network Temporary Identifier
USCH	Uplink Shared Channel
UTC	Universal Coordinated Time
UTRA	Universal Terrestrial Radio Access
UTRAN WAAS	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 DRNC/CRNC exactly and completely. The SRNC functional behaviour is left unspecified. The Physical Channel Reconfiguration procedure, [TDD – the UE Measurement Initiation, the UE Measurement Reporting, UE Measurement Termination, UE Measurement Failure,] and the Reset procedure are 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.

04.□ 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 for 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 Source Signalling Address Handling

The sender of an RNSAP messages shall include the Source Signalling Address, i.e. the Signalling Address of the sending node.

### 4.4 Specification Notations

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, 7.68Mcps 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, 7.68Mcps 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.
[7.68Mcps TDD]	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) paragraphs between the 7.68Mcps TDD specific paragraphs.
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 <i>Information Element Name</i> 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. <i>Transport Format Set</i> 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 RNSAP Services

# 5.1 RNSAP Procedure Modules

The Iur interface RNSAP procedures are divided into five modules as follows:

- 1. RNSAP Basic Mobility Procedures;
- 2. RNSAP Dedicated Procedures;
- 3. RNSAP Common Transport Channel Procedures;
- 4. RNSAP Global Procedures;

#### 5. RNSAP MBMS Procedures.

The Basic Mobility Procedures module contains procedures used to handle the mobility within UTRAN, within GERAN and between UTRAN and GERAN.

The Dedicated Procedures module contains procedures that are used to handle DCHs, [FDD – F-DPCH,] [TDD – DSCHs, USCHs], HS-DSCH and E-DCH between two RNSs. If procedures from this module are not used in a specific Iur, then the usage of DCH, [FDD – F-DPCH,] [TDD – DSCH, USCH,] HS-DSCH and E-DCH traffic between corresponding RNSs is not possible.

The Common Transport Channel Procedures module contains procedures that are used to control common transport channel data streams (excluding the DSCH, HS-DSCH and USCH) over Iur interface.

The Global Procedures module contains procedures that are not related to a specific UE. The procedures in this module are in contrast to the above modules involving two peer CRNCs/CBSSs.

The MBMS Procedures module contains procedures that are specific to MBMS and used for cases that cannot be handled by other modules.

### 5.2 Parallel Transactions

Unless explicitly indicated in the procedure specification, at any instance in time one protocol peer shall have a maximum of one ongoing RNSAP Dedicated procedure related to a certain UE.

# 6 Services Expected from Signalling Transport

The signalling transport shall provide two different service modes for the RNSAP.

- 1. Connection oriented data transfer service. This service is supported by a signalling connection between two RNCs. It shall be possible to dynamically establish and release signalling connections based on the need. Each active UE shall have its own signalling connection. The signalling connection shall provide in sequence delivery of RNSAP messages. RNSAP shall be notified if the signalling connection breaks.
- 2. Connectionless data transfer service. RNSAP shall be notified in case a RNSAP message did not reach the intended peer RNSAP entity.

# 7 Functions of RNSAP

The RNSAP protocol provides the following functions:

- Radio Link Management. This function allows the SRNC to manage radio links using dedicated resources in a DRNS;
- Physical Channel Reconfiguration. This function allows the DRNC to reallocate the physical channel resources for a Radio Link;
- Radio Link Supervision. This function allows the DRNC to report failures and restorations of a Radio Link;
- Compressed Mode Control [FDD]. This function allows the SRNC to control the usage of compressed mode within a DRNS;
- Measurements on Dedicated Resources. This function allows the SRNC to initiate measurements on dedicated resources in the DRNS. The function also allows the DRNC to report the result of the measurements;
- DL Power Drifting Correction [FDD]. This function allows the SRNC to adjust the DL power level of one or more Radio Links in order to avoid DL power drifting between the Radio Links;
- DCH Rate Control. This function allows the DRNC to limit the rate of each DCH configured for the Radio Link(s) of a UE in order to avoid congestion situations in a cell;

- CCCH Signalling Transfer. This function allows the SRNC and DRNC to pass information between the UE and the SRNC on a CCCH controlled by the DRNS;
- GERAN Signalling Transfer. This function allows the SBSS and DBSS, the SRNC and DBSS or the SBSS and DRNC to pass information between the UE/MS and the SRNC/SBSS on an SRB2/CCCH controlled by the DBSS/DRNC;
- Paging. This function allows the SRNC/SBSS to page a UE in a URA/GRA or a cell in the DRNS;
- Common Transport Channel Resources Management. This function allows the SRNC to utilise Common Transport Channel Resources within the DRNS;
- Relocation Execution. This function allows the SRNC/SBSS to finalise a Relocation previously prepared via other interfaces;
- Reporting of General Error Situations. This function allows reporting of general error situations, for which function specific error messages have not been defined;
- DL Power Timeslot Correction [TDD]. This function enables the DRNS to apply an individual offset to the transmission power in each timeslot according to the downlink interference level at the UE;
- Measurements on Common Resources. This function allows an RNC/BSS to request from another RNC/BSS to initiate measurements on Common Resources. The function also allows the requested RNC/BSS to report the result of the measurements;
- Information Exchange. This function allows an RNC to request from another RNC the transfer of information. The function also allows the requested RNC to report the requested information;
- Resetting the Iur. This function is used to completely or partly reset the Iur interface;
- UE Measurement Forwarding[TDD]. This function allows the DRNC to request and receive UE measurements from the SRNC;
- Tracing. This function allows the SRNC to activate or deactivate trace in a DRNC;.
- MDT function. This function allows the SRNC to enable the transfer of MDT measurements collected by the UE;
- MBMS UE Linking/De-linking. This function allows the SRNC to provide/update/remove the UE Link to/in/from the DRNC;
- MBMS URA Linking/De-linking. This function allows the SRNC to provide/update/remove the URA Link to/in/from the DRNC;
- MBMS Channel Type Indication. This function allows the DRNC to indicate to the SRNC the selected channel type for an MBMS bearer service within certain cells in the DRNS;
- MBMS Preferred Frequency Layer Indication. This function allows the DRNC to indicate to the SRNC the preferred frequency layer for an MBMS bearer service within certain cells in the DRNS;
- MBMS MCCH Information Control. This function allows an MRNC to distribute the MCCH Information to CRNC within the MBSFN cluster;
- Direct Information Transfer. This function allows an RNC to transfer information to another RNC;
- Relocating serving RNC. This function enables to change the serving RNC functionality as well as the related Iu resources (RAB(s) and Signalling connection) from one RNC to another;
- Exchanging information about the secondary UL frequency. This function allows the SRNC to transfer information about the secondary UL frequency to the DRNS and the DRNS to transfer information about the secondary UL frequency to SRNC in Dual-Cell E-DCH operation;
- Radio Resource Reserve Handover [1.28Mcps TDD]. This function allows the SRNC to request allocation of radio resources in the target BSS prior to the HANDOVER REQUEST message is received from the Core Network;

- Automatic Neighbour Relation Management: This function enables RNC to distribute ANR reports, configure ANR neighbour relations, and control the ANR report distribution.

The mapping between the above functions and RNSAP elementary procedures is shown in the Table 1.

Function	Elementary Procedure(s)
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-emptioni) Radio Link
	Áctivation
	j) Radio Link Parameter Update
Physical Channel Reconfiguration	Physical Channel Reconfiguration
Radio Link Supervision	a) Radio Link Failure
	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
DCH Rate Control	a) Radio Link Setup
	b) Radio Link Addition
	c) Unsynchronised Radio Link Reconfiguration
	d) Synchronised Radio Link Reconfiguration
	Preparation
	e) Radio Link Congestion
CCCH Signalling Transfer	a) Uplink Signalling Transfer
	b) Downlink Signalling Transfer
GERAN Signalling Transfer	a) GERAN Uplink Signalling Transfer
	b) Downlink Signalling Transfer
Paging	Paging
Common Transport Channel Resources	a) Common Transport Channel Resources
Management	Initiation
	b) Common Transport Channel Resources
	Release
Relocation Execution	Relocation Commit
Reporting of General Error Situations	Error Indication
Measurements on Common Resources	a) Common Measurement Initiation
	b) Common Measurement Reporting
	c) Common Measurement Termination
	d) Common Measurement Failure
Information Exchange	a) Information Exchange Initiation
	b) Information Reporting
	c) Information Exchange Termination
	d) Information Exchange Failure
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control
Reset	Reset
UE Measurement Forwarding[TDD]	a) UE Measurement Initiation
	b) UE Measurement Reporting
	c) UE Measurement Termination
	d) UE Measurement Failure
Trace	a) lur Invoke Trace
	b) lur Deactivate Trace
	by fur Deactivate Trace

Table 1: Mapping between functions and RNSAP elementary procedures
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Function	Elementary Procedure(s)
MBMS UE Linking/De-linking	a) Common Transport Channel Resources
	Initiation
	b) Radio Link Setup
	c) Downlink Signalling Transfer
	d) MBMS Attach
	e) MBMS Detach
MBMS Channel Type Indication	a) Direct Information Transfer
	b) Uplink Signalling Transfer
	c) Radio Link Setup
	d) Radio Link Addition
	e) Common Transport Channel Resources
	Initiation
MBMS Preferred Frequency Layer Indication	a) Direct Information Transfer
	b) Radio Link Setup
	d) Radio Link Addition
MBMS URA Linking/De-linking	a) Downlink Signalling Transfer
	b) MBMS Attach
	c) MBMS Detach
MBMS MCCH Information Control	a) MBSFN MCCH Information
Direct Information Transfer	a) Direct Information Transfer
Relocating serving RNC	a) Enhanced Relocation
	b) Enhanced Relocation Cancel
	c) Enhanced Relocation Signalling Transfer
	d) Enhanced Relocation Release
Exchanging information about the secondary	a) Secondary UL Frequency Reporting
UL frequency [FDD]	b) Secondary UL Frequency Update
Radio Resource Reserve Handover [1.28Mcps	a) Enhanced Relocation Resource Allocation
TDD]	b) Enhanced Relocation Resource Release
Automatic Neighbour Relation Management	a) Direct Information Transfer
	b) Information Exchange Initiation
	c) Information Reporting
	d) Information Exchange Termination
	e) Information Exchange Failure
	f) Information Transfer Control

# 7.1 RNSAP functions and elementary procedures for lur-g.

The functions and RNSAP elementary procedures, which are applicable on the Iur-g interface are shown in the Table 1A.

Table 1A: RNSAP elementary procedures applicable on the lur-g interface	Table 1A: RNSAP	elementary	procedures	applicable or	n the lur-g interface
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Function	Elementary Procedure(s)
GERAN Signalling Transfer	a) GERAN Uplink Signalling Transfer
	b) Downlink Signalling Transfer
Paging	Paging
Relocation Execution	Relocation Commit
Reporting of General Error Situations	Error Indication
Measurements on Common Resources	a) Common Measurement Initiation
	b) Common Measurement Reporting
	c) Common Measurement Termination
	d) Common Measurement Failure
Information Exchange	a) Information Exchange Initiation
	b) Information Reporting
	c) Information Exchange Termination
	d) Information Exchange Failure
Radio Resource Reserve Handover [1.28Mcps	a) Enhanced Relocation Resource Allocation
TDD]	b) Enhanced Relocation Resource Release

NOTE: In the connection with the functions related to the GERAN and UTRAN, the term RNC shall refer to RNC/BSS.

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# 8 RNSAP Procedures

# 8.1 Elementary Procedures

In the following tables, all Eps are divided into Class 1 and Class 2 Eps.

Elementary	Initiating Message	Successful Outcome	Unsuccessful Outcome
Procedure		Response message	Response message
Radio Link Setup	RADIO LINK SETUP REQUEST	RADIO LINK SETUP RESPONSE	RADIO LINK SETUP FAILURE
Radio Link Addition	RADIO LINK ADDITION REQUEST	RADIO LINK ADDITION RESPONSE	RADIO LINK ADDITION FAILURE
Radio Link Deletion	RADIO LINK DELETION REQUEST	RADIO LINK DELETION RESPONSE	
Synchronised Radio Link Reconfiguration Preparation	RADIO LINK RECONFIGURATION PREPARE	RADIO LINK RECONFIGURATION READY	RADIO LINK RECONFIGURATION FAILURE
Unsynchronised Radio Link Reconfiguration	RADIO LINK RECONFIGURATION REQUEST	RADIO LINK RECONFIGURATION RESPONSE	RADIO LINK RECONFIGURATION FAILURE
Physical Channel Reconfiguration	PHYSICAL CHANNEL RECONFIGURATION REQUEST	PHYSICAL CHANNEL RECONFIGURATION COMMAND	PHYSICAL CHANNEL RECONFIGURATION FAILURE
Dedicated Measurement Initiation	DEDICATED MEASUREMENT INITIATION REQUEST	DEDICATED MEASUREMENT INITIATION RESPONSE	DEDICATED MEASUREMENT INITIATION FAILURE
Common Transport Channel Resources Initialisation	COMMON TRANSPORT CHANNEL RESOURCES REQUEST	COMMON TRANSPORT CHANNEL RESOURCES RESPONSE	COMMON TRANSPORT CHANNEL RESOURCES FAILURE
Common Measurement Initiation	COMMON MEASUREMENT INITIATION REQUEST	COMMON MEASUREMENT INITIATION RESPONSE	COMMON MEASUREMENT INITIATION FAILURE
Information Exchange Initiation	INFORMATION EXCHANGE INITIATION REQUEST	INFORMATION EXCHANGE INITIATION RESPONSE	INFORMATION EXCHANGE INITIATION FAILURE
Reset	RESET REQUEST	RESET RESPONSE	
UE Measurement Initiation[TDD]	UE MEASUREMENT INITIATION REQUEST	UE MEASUREMENT INITIATION RESPONSE	UE MEASUREMENT INITIATION FAILURE
Enhanced Relocation	ENHANCED RELOCATION REQUEST	ENHANCED RELOCATION RESPONSE	ENHANCED RELOCATION FAILURE
Enhanced Relocation Resource Allocation[1.28Mc ps TDD]	ENHANCED RELOCATION RESOURCE REQUEST	ENHANCED RELOCATION RESOURCE RESPONSE	ENHANCED RELOCATION RESOURCE FAILURE
Enhanced Relocation Resource Release[1.28Mcp s TDD]	ENHANCED RELOCATION RESOURCE RELEASE COMMAND	ENHANCED RELOCATION RESOURCE RELEASE COMPLETE	

Elementary Procedure	Initiating Message	
Uplink Signalling Transfer	UPLINK SIGNALLING TRANSFER INDICATION	
GERAN Uplink Signalling Transfer	GERAN UPLINK SIGNALLING TRANSFER	
	INDICATION	
Downlink Signalling Transfer	DOWNLINK SIGNALLING TRANSFER	
6 6	REQUEST	
Relocation Commit	RELOCATION COMMIT	
Paging	PAGING REQUEST	
Synchronised Radio Link Reconfiguration Commit	RADIO LINK RECONFIGURATION 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	
Downlink Power Control [FDD]	DL POWER CONTROL REQUEST	
Compressed Mode Command [FDD]	COMPRESSED MODE COMMAND	
Common Transport Channel Resources Release	COMMON TRANSPORT CHANNEL	
	RESOURCES RELEASE REQUEST	
Error Indication	ERROR INDICATION	
Downlink Power Timeslot Control [TDD]	DL POWER TIMESLOT CONTROL REQUEST	
Radio Link Pre-emption	RADIO LINK PREEMPTION REQUIRED	
	INDICATION	
Radio Link Congestion	RADIO LINK CONGESTION INDICATION	
Common Measurement Reporting	COMMON MEASUREMENT REPORT	
Common Measurement Termination	COMMON MEASUREMENT TERMINATION REQUEST	
Common Measurement Failure	COMMON MEASUREMENT FAILURE	
Information Reporting	INFORMATION REPORT	
Information Exchange Termination	INFORMATION EXCHANGE TERMINATION REQUEST	
Information Exchange Failure	INFORMATION EXCHANGE FAILURE	
MBMS Attach	MBMS ATTACH COMMAND	
MBMS Detach	MBMS DETACH COMMAND	
Radio Link Parameter Update	RADIO LINK PARAMETER UPDATE	
	INDICATION	
UE Measurement Reporting [TDD]	UE MEASUREMENT REPORT	
UE Measurement Termination [TDD]	UE MEASUREMENT TERMINATION REQUEST	
UE Measurement Failure [TDD]	UE MEASUREMENT FAILURE INDICATION	
Iur Invoke Trace	IUR INVOKE TRACE	
Iur Deactivate Trace	IUR DEACTIVATE TRACE	
Direct Information Transfer	DIRECT INFORMATION TRANSFER	
Enhanced Relocation Cancel	ENHANCED RELOCATION CANCEL	
Enhanced Relocation Signalling Transfer	ENHANCD RELOCATION SIGNALLING TRANSFER	
Enhanced Relocation Release	ENHANCD RELOCATION RELEASE	
MBSFN MCCH Information	MBSFN MCCH INFORMATION	
Secondary UL Frequency Reporting [FDD]	SECONDARY UL FREQUENCY REPORT	
Secondary UL Frequency Update[FDD]	SECONDARY UL FREQUENCY UPDATE INDICATION	
Information Transfer Control	INFORMATION TRANSFER CONTROL REQUEST	

# Table 3: Class 2 Elementary Procedures

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# 8.2 Basic Mobility Procedures

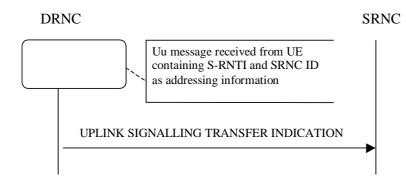
# 8.2.1 Uplink Signalling Transfer

# 8.2.1.1 General

The procedure is used by the DRNC to forward a Uu message received on the CCCH to the SRNC.

This procedure shall use the connectionless mode of the signalling bearer.

# 8.2.1.2 Successful Operation



### Figure 1: Uplink Signalling Transfer procedure, Successful Operation

When the DRNC receives an Uu message on the CCCH in which the UE addressing information is U-RNTI, i.e. S-RNTI and SRNC-ID, DRNC shall send the UPLINK SIGNALLING TRANSFER INDICATION message to the SRNC identified by the SRNC-ID received from the UE.

If at least one URA Identity is being broadcast in the cell where the Uu message was received (the accessed cell), the DRNC shall include a URA Identity for this cell in the *URA ID* IE, the *Multiple URAs Indicator* IE indicating whether or not multiple URA Identities are being broadcast in the accessed cell, and the RNC Identity of all other RNCs that are having at least one cell within the URA where the Uu message was received in the *URA Information* IE in the UPLINK SIGNALLING TRANSFER INDICATION message.

The DRNC shall include in the message the C-RNTI that it allocates to identify the UE in the radio interface in the accessed cell. If there is no valid C-RNTI for the UE in the accessed cell, the DRNS shall allocate a new C-RNTI for the UE [FDD – and in case Enhanced FACH operation is activated in the accessed cell the DRNC shall allocate the HS-DSCH-RNTI to the UE and shall include the *HS-DSCH-RNTI* IE in the message. And in case Common E-DCH operation is activated in the accessed cell the DRNC shall allocate the HS-DSCH-RNTI IE in the message]. [1.28Mcps TDD – and in case Enhanced FACH operation is activated in the accessed cell the DRNC shall allocate the HS-DSCH-RNTI IE in the message]. [1.28Mcps TDD – and in case Enhanced FACH operation is activated in the accessed cell the DRNC shall allocate the HS-DSCH-RNTI to the UE and shall include the *HS-DSCH-RNTI* IE in the message and the DRNC shall allocate the E-RNTI received from Node B and shall include the *E-RNTI* IE in the message]. If the DRNS allocates a new C-RNTI it shall also release any C-RNTI previously allocated for the UE.

If the DRNS has any RACH and/or FACH resources allocated for the UE identified by the U-RNTI in another cell than the accessed cell in which the Mac SDU sizes, flow control settings (including credits) and/or transport bearer are different from those in the old cell, then the DRNS shall not include the *Common Transport Channel Resources Initialisation Not Required* IE in the UPLINK SIGNALLING TRANSFER INDICATION message. In addition the DRNS shall release these RACH and/or FACH resources in old cell.

If the DRNS has any RACH and/or FACH resources allocated for the UE identified by the U-RNTI in another cell than the accessed cell in which the Mac SDU sizes, flow control settings (including credits) and transport bearer are the same as in the old cell, there is no need for Common Transport Channel Resources Initialisation to be initiated. In that case, DRNC may include the *Common Transport Channel Resources Initialisation Not Required* IE in the UPLINK SIGNALLING TRANSFER INDICATION message. In addition, the DRNS shall move these RACH and/or FACH resources to the new cell. If no Common Transfer Channel Resources Initialisation procedure is executed, the currently applicable Mac SDU sizes, flow control settings (including credits) and transport bearer shall continue to be used while the UE is in the new cell.

If no context exists for this UE in the DRNC, the DRNC shall create a UE Context for this UE, allocate a D-RNTI for the UE Context, and include the *D-RNTI* IE and the identifiers for the CN CS Domain and CN PS Domain that the DRNC is connected to in the UPLINK SIGNALLING TRANSFER INDICATION message. These CN Domain Identifiers shall be based on the LAC and RAC respectively of the cell where the message was received from the UE.

Depending on local configuration in the DRNS, it may include the geographical co-ordinates of the cell, represented either by the *Cell GAI* IE or by the *Cell GA Additional Shapes* IE, in which the Uu message was received in the UPLINK SIGNALLING TRANSFER INDICATION message. If the DRNC includes the *Cell GA Additional Shapes* IE in the UPLINK SIGNALLING TRANSFER INDICATION message, it shall also include the *Cell GAI* IE.

[FDD – The DRNC shall include the *DPC Mode Change Support Indicator* IE in the UPLINK SIGNALLING TRANSFER INDICATION message if the accessed cell supports DPC mode change.]

The DRNC shall include [FDD – the *Cell Capability Container FDD* IE] [3.84Mcps TDD – the *Cell Capability Container TDD* IE] [1.28Mcps TDD – the *Cell Capability Container TDD LCR* IE] [7.68Mcps TDD – the *Cell Capability Container 7.68Mcps TDD* IE] [FDD – and/or the *Cell Capability Container Extension FDD* IE] in the UPLINK SIGNALLING TRANSFER INDICATION message if the accessed cell supports any functionalities listed in [FDD – 9.2.2.D] [3.84Mcps TDD – 9.2.3.1a] [1.28Mcps TDD – 9.2.3.1b] [7.68Mcps TDD – 9.2.3.31] [FDD – 9.2.2.123].

[FDD – If the cell is multicell adjacent and/or non-adjacent carrier operation capable and if the cell can be the serving HS-DSCH then the possible cells to serve multicell adjacent and/or non-adjacent carrier operation (same or adjacent sector in the same Node B) that can act as secondary serving HS-DSCH shall be listed in the *Secondary Serving Cell List* IE. For each cell in the *Secondary Serving Cell List* IE that is Multi Cell E-DCH capable, indicated in the *Cell Capability Container Extension FDD* IE by the Multi Cell E-DCH Support Indicator bit = "1", and is restricted for use as an Additional E-DCH on the secondary uplink frequency with the accessed cell as the corresponding cell of the primary uplink frequency, the DRNS shall, if supported, include the *Multicell E-DCH Restriction* IE set to "TRUE". If the *Secondary Serving Cell List* IE is not present, the multicell (adjacent or non-adjacent carrier operation) capable cell can only serve as a secondary serving HS-DSCH cell in single band operation.]

[FDD – If the cell is dual band capable and if the cell can be the serving HS-DSCH then the possible cells to serve dual band carrier operation (same sector) that can act as secondary serving HS-DSCH shall be listed in the *Dual Band Secondary Serving Cell List* IE. If the *Dual Band Secondary Serving Cell List* IE is not present, the dual band capable cell can only serve as a secondary serving HS-DSCH cell in dual band operation.]

If MOCN or GWCN network sharing configuration is used then the DRNC shall include the broadcasted PLMN identities of the concerned cell in the *Multiple PLMN List* IE in the UPLINK SIGNALLING TRANSFER INDICATION message.

If available, the DRNC shall include the SNA Information IE for the concerned cell.

When receiving the *SNA Information* IE, the SRNC should use it to restrict cell access based on SNA information. See also TS 25.401 [40] for a broader description of the SNA access control.

[FDD – The DRNC shall include the *Cell Portion ID* IE in the UPLINK SIGNALLING TRANSFER INDICATION message if available.]

[1.28 Mcps TDD – The DRNC shall include the *Cell Portion LCR ID* IE in the UPLINK SIGNALLING TRANSFER INDICATION message if available.]

[FDD – If the propagation delay value exceeds the range of the *Propagation Delay* IE then the DRNC shall if supported include the *Extended Propagation Delay* IE and set the *Propagation Delay* IE to its maximum value.]

If the *D-RNTI* IE is not to be included in the UPLINK SIGNALLING TRANSFER INDICATION message and the UE Link is currently stored in the UE Context in the DRNC, the DRNC shall assume that the UE changes the cell under which it camps in the DRNS (see TS 25.346 [50], section 5.1.6 on intra-DRNC cell change). In this case, if an MBMS session for some MBMS bearer services contained in the UE Link is ongoing in the cell identified by the *UC-ID* IE, the DRNC shall include in the *Active MBMS Bearer Service List* IE the *Transmission Mode* IE for each of these active MBMS Selected Services are included, and the Uu message requests for MBMS PtP radio bearer establishment, the DRNC shall determine which TMGIs correspond with the short identities and shall include in the *Active MBMS Bearer Service List* IE for each of these MBMS Bearer Service List IE the *Transmission Mode* IE for establishment, the DRNC shall determine which TMGIs correspond with the short identities and shall include in the *Active MBMS Bearer Service List* IE for each of these MBMS Selected Services.

If the CCCH message contains *Measurement results for monitored cells on non-used frequencies* IE in *Measured Result on RACH* IE, the DRNC may include in the UPLINK SIGNALLING TRANSFER INDICATION message the *Inter-frequency Cell List* IE for each of the measured inter-frequency cells. The order of cells in *Measurement results for monitored cells on non-used frequencies* IE in the CCCH message shall be preserved in *Inter-frequency Cell List* IE. If the *UL UARFCN* IE in the *Inter-frequency Cell List* IE is not present, the default duplex distance defined for the operating frequency band shall be used in the SRNC (see TS 25.101 [43]).

[3.84 Mcps TDD – the DRNC shall include the *Rx Timing Deviation* IE unless the cell to which the CCCH message was sent is configured to use the extended timing advance in which case *Rx Timing Deviation 3.84Mcps Extended* IE shall be included.]

[7.68 Mcps TDD – the DRNC shall include the Rx Timing Deviation 7.68Mcps IE.]

### 8.2.1.3 Abnormal Conditions

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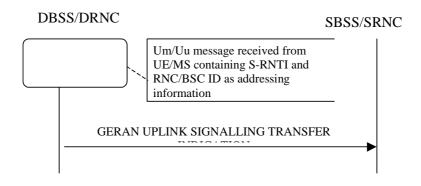
# 8.2.1A GERAN Uplink Signalling Transfer

## 8.2.1A.1 General

The procedure is used by the DBSS to forward an Um message received on the SRB2 to the SBSS/SRNC. The procedure is also used by the DRNC to forward a Uu message received on the CCCH to the SBSS.

This procedure shall use the connectionless mode of the signalling bearer.

# 8.2.1A.2 Successful Operation



### Figure 1A: GERAN Uplink Signalling Transfer procedure, Successful Operation

When the DBSS receives an Um message on the SRB2 in which the MS addressing information is G-RNTI, i.e. S-RNTI and BSC-ID, DBSS shall send the GERAN UPLINK SIGNALLING TRANSFER INDICATION message to the SBSS/SRNC identified by the BSC-ID received from the MS.

Alternatively, when the DRNC receives an Uu message on the CCCH in which the UE addressing information is U-RNTI, i.e. S-RNTI and SRNC-ID, and in which the SRNC-ID points to a GERAN BSS, the DRNC shall send the GERAN UPLINK SIGNALLING TRANSFER INDICATION message to the SBSS identified by SRNC-ID received from the UE.

If at least one GRA/URA Identity is being broadcast in the cell where the Um/Uu message was received (the accessed cell), the DBSS/DRNC shall include a GRA/URA Identity for this cell in the *URA ID* IE, the *Multiple URAs Indicator* IE indicating whether or not multiple GRA/URA Identities are being broadcast in the accessed cell, and the RNC/BSS Identity of all other RNC/BSSs that are having at least one cell within the GRA/URA where the Um/Uu message was received in the *URA Information* IE in the GERAN UPLINK SIGNALLING TRANSFER INDICATION message.

If no context exists for this UE/MS in the DBSS/DRNC, the DBSS/DRNC shall create a UE Context for this UE/MS, allocate a D-RNTI for the UE Context, and include the *D-RNTI* IE and the identifiers for the CN CS Domain and CN PS Domain that the DBSS/DRNC is connected to in the GERAN UPLINK SIGNALLING TRANSFER INDICATION

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message. These CN Domain Identifiers shall be based on the LAC and RAC respectively of the cell where the message was received from the UE/MS.

# 8.2.1A.3 Abnormal Conditions

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# 8.2.2 Downlink Signalling Transfer

# 8.2.2.1 General

The procedure is used by the SRNC to request to the DRNC the transfer of a Uu message on the CCCH in a cell. When used, the procedure is in response to a received Uplink Signalling Transfer procedure.

This procedure shall use the connectionless mode of the signalling bearer.

### 8.2.2.1.1 Downlink Signalling Transfer for lur-g

The procedure is used by the SRNC/SBSS to request to the DBSS the transfer of an Um message on the SRB2 in a cell.

The procedure is used by the SBSS to request to the DRNC the transfer of a Uu message on the CCCH in a cell.

# 8.2.2.2 Successful Operation



### Figure 2: Downlink Signalling Transfer procedure, Successful Operation

The procedure consists of the DOWNLINK SIGNALLING TRANSFER REQUEST message sent by the SRNC to the DRNC.

The message contains the Cell Identifier (C-ID) contained in the received UPLINK SIGNALLING TRANSFER INDICATION message and the D-RNTI.

Upon receipt of the message, the DRNC shall send the L3 Information on the CCCH in the cell indicated by the *C-ID* IE to the UE identified by the *D-RNTI* IE.

If the *D-RNTI Release Indication* IE is set to "Release D-RNTI" and the DRNS has no dedicated resources (DCH, [TDD – USCH and/or DSCH]) allocated for the UE, the DRNS shall release the D-RNTI, the UE Context and any RACH and FACH resources and any C-RNTI allocated to the UE Context upon receipt of the DOWNLINK SIGNALLING TRANSFER REQUEST message. If a UE Link is currently stored in the UE Context, the DRNC shall perform UE De-linking as specified in TS 25.346 [50], section 5.1.6.

If the *D-RNTI Release Indication* IE is set to "Release D-RNTI" and the DRNS has dedicated resources allocated for the UE, the DRNS shall only release any RACH and FACH resources and any C-RNTI allocated to the UE Context upon receipt of the DOWNLINK SIGNALLING TRANSFER REQUEST message.

If the *MBMS Bearer Service List* IE is included and *URA-ID* IE is not included in the DOWNLINK SIGNALLING TRANSFER REQUEST message, the DRNC shall perform the UE Linking as specified in TS 25.346 [50], section 5.1.6.

If the *MBMS Bearer Service List* IE is included and the *URA-ID* IE is included in the DOWNLINK SIGNALLING TRANSFER REQUEST message, the DRNC shall perform the URA Linking as specified in TS 25.346 [50], section 5.1.10.

If the *MBMS Bearer Service List* IE is included and the *Old URA-ID* IE is included in the DOWNLINK SIGNALLING TRANSFER REQUEST message, the DRNC shall perform URA De-linking for the URA identified by the *Old URA-ID* IE as specified in TS 25.346 [50], section 5.1.10.

[FDD – If the *Enhanced PCH Capability* IE is included in the message, the DRNC should store the information. If the *Enhanced PCH Capability* IE is not included in the message, the DRNC shall use the information to release an RRC Connection for the UE in cells supporting Enhanced PCH.]

[1.28Mcps TDD – If the *Enhanced PCH Capability* IE is included in the message, the DRNC should store the information. If the *Enhanced PCH Capability* IE is not included in the message, the DRNC shall use the information to release an RRC Connection for the UE in cells supporting Enhanced PCH.]

## 8.2.2.2.1 Successful Operation for lur-g

The procedure consists of the DOWNLINK SIGNALLING TRANSFER REQUEST message sent by the SRNC/SBSS to the DBSS or by the SBSS to the DRNC.

The message contains the Cell Identifier (C-*ID*) contained in the received UPLINK SIGNALLING TRANSFER INDICATION message and the D-RNTI.

Upon receipt of the message, the DBSS shall send the L3 Information on the SRB2 in the cell indicated by the *C-ID* IE to the UE/MS identified by the *D-RNTI* IE.

Upon receipt of the message, the DRNC shall send the L3 Information on the CCCH in the cell indicated by the *C-ID* IE to the UE/MS identified by the *D-RNTI* IE.

# 8.2.2.3 Abnormal Conditions

If the user identified by the *D-RNTI* IE has already accessed another cell controlled by the DRNC than the cell identified by the *C-ID* IE in the DOWNLINK SIGNALLING TRANSFER REQUEST message, the message shall be ignored.

## 8.2.2.3.1 Abnormal Conditions for lur-g

If the user identified by the *D-RNTI* IE has already accessed another cell controlled by the DRNC/DBSS than the cell identified by the *C-ID* IE in the DOWNLINK SIGNALLING TRANSFER REQUEST message, the message shall be ignored.

If the DRNC receives from the SBSS the DOWNLINK SIGNALLING TRANSFER REQUEST message, in which the *D-RNTI Release Indication* IE is set to "not Release D-RNTI", the DRNC shall ignore this IE and release the D-RNTI.

If the DBSS receives from the SBSS/SRNC the DOWNLINK SIGNALLING TRANSFER REQUEST message, in which the *D-RNTI Release Indication* IE is set to "not Release D-RNTI", the DBSS shall ignore this IE and release the D-RNTI.

# 8.2.3 Relocation Commit

# 8.2.3.1 General

The Relocation Commit procedure is used by source RNC to execute the Relocation. This procedure supports the Relocation procedures described in TS 25.413 [2].

This procedure shall use the signalling bearer mode specified below.

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# 8.2.3.2 Successful Operation

Source RNC		Target RNC
	RELOCATION COMMIT	

### Figure 3: Relocation Commit procedure, Successful Operation

The source RNC sends the RELOCATION COMMIT message to the target RNC to request the target RNC to proceed with the Relocation. When the UE is utilising one or more radio links in the DRNC the message shall be sent using the connection oriented service of the signalling bearer and no further identification of the UE Context in the DRNC is required. If on the other hand, the UE is not utilising any radio link the message shall be sent using the connectionless service of the signalling bearer and the *D-RNTI* IE shall be included in the message to identify the UE Context in the DRNC.

Upon receipt of the RELOCATION COMMIT message from the source RNC the target RNC finalises the Relocation. If the message contains the transparent *RANAP Relocation Information* IE the target RNC shall use this information when finalising the Relocation.

# 8.2.3.2.1 Successful Operation for lur-g

The source RNC/BSS sends the RELOCATION COMMIT message to the target RNC/BSS to request the target RNC/BSS to proceed with the Relocation.

The message shall be sent using the connectionless service of the signalling bearer and the *D*-*RNTI* IE shall be included in the message to identify the UE/MS context in the DBSS.

Upon receipt of the RELOCATION COMMIT message from the source RNC/BSS, the target RNC/BSS finalises the Relocation. If the message contains the transparent *RANAP Relocation Information* IE the target RNC/BSS shall use this information when finalising the Relocation.

# 8.2.3.3 Abnormal Conditions

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# 8.2.4 Paging

### 8.2.4.1 General

This procedure is used by the SRNC to indicate to a CRNC that a UE shall be paged in a cell or URA that is under the control of the CRNC.

This procedure shall use the connectionless mode of the signalling bearer.

# 8.2.4.2 Successful Operation



### Figure 4: Paging procedure, Successful Operation

The procedure is initiated with a PAGING REQUEST message sent from the SRNC to the CRNC.

If the message contains the *C-ID* IE, the CRNC shall page in the indicated cell. Alternatively, if the message contains the *URA-ID* IE, the CRNC shall page in all cells that it controls in the indicated URA.

If the PAGING REQUEST message includes the *CN Originated Page to Connected Mode UE* IE, the CRNC shall include the information contained in the *CN Originated Page to Connected Mode UE* IE when paging the UE.

The CRNC shall calculate the Paging Occasions from the *IMSI* IE and the *DRX Cycle Length Coefficient* IE according to specification in TS 25.304 [15] and apply transmission on PICH and PCH [FDD – or HS-DSCH] [1.28Mcps TDD – or HS-DSCH] accordingly.

[FDD – If the PAGING REQUEST message includes the *Enhanced PCH Capability* IE, the CRNC shall use the information to page the UE in cells supporting Enhanced PCH.]

[1.28Mcps TDD – If the PAGING REQUEST message includes the *Enhanced PCH Capability* IE, the CRNC shall use the information to page the UE in cells supporting Enhanced PCH.]

### 8.2.4.2.1 Successful Operation for lur-g

The procedure is initiated with a PAGING REQUEST message sent from the SBSS to the CRNC/CBSS or from the SRNC to the CBSS.

If the message contains the URA-ID IE, the CRNC/CBSS shall page in all cells that it controls in the indicated URA/GRA.

If the PAGING REQUEST message includes the *CN Originated Page to Connected Mode UE* IE, the CRNC/CBSS shall include the information contained in the *CN Originated Page to Connected Mode UE* IE when paging the UE.

The CBSS shall calculate the Paging Occasions from the *IMSI* IE and the *GERAN DRX Cycle Length Coefficient* IE according to specification in TS 44.118 [36] and apply transmission on PCCCH or PACCH accordingly.

### 8.2.4.3 Abnormal Conditions

### 8.2.4.3.1 Abnormal Conditions for lur-g

If the DRNC receives a PAGING REQUEST message from the SBSS, which contains the *C-ID* IE, the message shall be ignored.

If the DBSS receives a PAGING REQUEST message from the SBSS/SRNC, which contains the *C-ID* IE, the message shall be ignored.

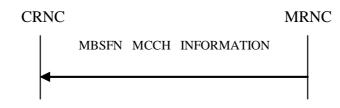
# 8.2.5 MBSFN MCCH Information

## 8.2.5.1 General

The procedure is used by the MRNC to inform the CRNC of the MCCH configuration and scheduling information used in MRNC.

This procedure shall use the connectionless mode of the signalling bearer.

### 8.2.5.2 Successful Operation



### Figure 4A: MBSFN MCCH Information procedure, Successful Operation

The procedure is used for MBSFN operation when a MRNC is used.

The message contains the MCCH message list sent on the MRNC and the MCCH configuration information of the MRNC.

Upon receipt of the message, if the *MCCH Configuration* IE exists, the CRNC shall setup or reconfigure the MCCH of all cells in the MBSFN cluster with the configuration contained in this IE, and update the System Information of these cells.

The CRNC shall decode the *L3 Information* IE contained in the *MCCH Message List* IE and apply the RLC/MAC/PHY configuration specified by relative MCCH Message to setup the RB information of MTCH, and then send the *L3 Information* IE on the MCCH in the receiving sequence at the beginning of the first MCCH modification period following the CFN indicated by the *CFN* IE.

In case MRNC is used and TDM multiplexing is used over air interface, the *MBSFN Scheduling Transmission Time Interval info List* IE shall be contained to show the scheduling transmission time interval for MBMS service which is configured with MBSFN TDM multiplexing. The CRNC shall schedule received data packets in the scheduling transmission time interval following the time point indicated by the timestamp.

# 8.2.5.3 Abnormal Conditions

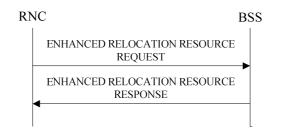
8.2.6 Enhanced Relocation Resource Allocation[1.28Mcps TDD]

# 8.2.6.1 General

The purpose of this procedure is to inform the BSS to pre-allocate resource for UE relocation from UTRAN to GERAN.

This procedure shall use the signalling bearer connection for the relevant UE context.

# 8.2.6.2 Successful Operation

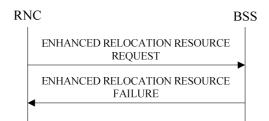


### Figure 4B: Enhanced Relocation Resource Allocation Procedure, Successful Operation

The RNC initiates the Enhanced Relocation Resource Allocation procedure by sending the ENHANCED RELOCATION RESOURCE REQUEST message to the BSS to request the BSS to prepare resource for the relocation.

Upon receipt of the ENHANCED RELOCATION RESOURCE REQUEST message form the RNC, the BSS finalises the relocation resource preparation and sends ENHANCED RELOCATION RESOURCE RESPONSE message to the RNC.

# 8.2.6.3 Unsuccessful Operation



### Figure 4C: Enhanced Relocation Resource Allocation Procedure, Unsuccessful Operation

If the BSS is not able to finalise the relocation resource preparation or can not accept the relocation resource request during the handover procedure, the BSS shall send the ENHANCED RELOCATION RESOURCE FAILURE message to the RNC.

8.2.6.4 Abnormal Conditions

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# 8.2.7 Enhanced Relocation Resource Release[1.28Mcps TDD]

## 8.2.7.1 General

This procedure is used by the RNC to infom BSS that related resource pre-allocated for UE shall be released due to failure of the enhanced relocation from UTRAN TDD to GERAN.

This procedure shall use the signalling bearer connection for the relevant UE context.

# 8.2.7.2 Successful Operation



### Figure 4D: Enhanced Relocation Resource Release Procedure, Successful Operation

The Enhanced Relocation Resource Release procedure is initiated by sending the ENHANCED RELOCATION RESOURCE RELEASE COMMAND message from the RNC to the BSS.

Upon reception of the ENHANCED RELOCATION RESOURCE RELEASE COMMAND message, the BSS shall release related resource pre-allocated for UE, and then responsed with the ENHANCD RELOCATION RESOURCE RELEASE COMPLETE meassage.

# 8.2.7.3 Abnormal Conditions

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# 8.3 Dedicated Procedures

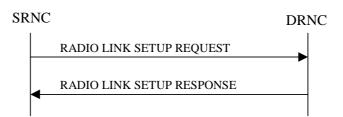
# 8.3.1 Radio Link Setup

### 8.3.1.1 General

This procedure is used for establishing the necessary resources in the DRNS for one or more radio links.

The connection-oriented service of the signalling bearer shall be established in conjunction with this procedure.

# 8.3.1.2 Successful Operation



### Figure 5: Radio Link Setup procedure: Successful Operation

When the SRNC makes an algorithmic decision to add the first cell or set of cells from a DRNS to the active set of a specific UE-UTRAN connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request establishment of the radio link(s). The Radio Link Setup procedure is initiated with this RADIO LINK SETUP REQUEST message sent from the SRNC to the DRNC.

Upon receipt of the RADIO LINK SETUP REQUEST message, the DRNS 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 DRNS shall prioritise resource allocation for the RL(s) to be established according to Annex A.

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request for a time period not to exceed the value of the *Allowed Queuing Time* IE before starting to execute the request.

If the *UE Aggregate Maximum Bit Rate* IE is contained in the RADIO LINK SETUP REQUEST message, the DRNS shall, if supported, store the received UE Aggregate Maximum Bit Rate parameters to control the aggregate data rate of non GBR traffic for this UE.

If the *Usefulness of Battery Optimization* IE is contained in the RADIO LINK SETUP REQUEST message, the DRNC may store the received value and use it to determine whether this UE can benefit from battery optimization techniques.

### **Transport Channels Handling:**

### DCH(s):

[TDD – If the *DCH Information* IE is present in the RADIO LINK SETUP REQUEST message, the DRNS shall configure the new DCHs 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 DRNS shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs.

If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the DRNS 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 DRNS 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 each DCH which do not belong to a set of co-ordinated DCHs, and which includes a *QE-Selector* IE set to "selected", the DRNS shall use the Transport channel BER from that DCH for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. If the *QE-Selector* IE is set to "non-selected", the DRNS shall use the Physical channel BER for the QE in the UL data frames, TS 25.427 [4].]

For a set of co-ordinated DCHs, the DRNS shall use the Transport channel BER from the DCH with the *QE*-Selector IE set to "selected" for the QE in the UL data frames, TS 25.427 [4]. [FDD – If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. If all DCHs have *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4].] [TDD – If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, TS 25.427 [4].]

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

The DRNS 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.

The DRNS 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.

The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise between different frames of the data frames of the DCHs in the downlink on the radio interface in congestion situations once the new RL(s) have been activated.

The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE indicates the value "RRC".

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 DRNS to determine the transport bearer characteristics to apply in the uplink for the related DCH or set of co-ordinated DCHs.

If the *DCH Information* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:

- If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the Guaranteed Rate in the uplink of this DCH. The DRNS may decide to request the SRNC to limit the user rate of the uplink of the DCH at any point in time. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to only reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the DCH Specific Info IE in the DCH Information IE does not include the *Guaranteed UL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.
- If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the Guaranteed Rate in the downlink of this DCH. The DRNS may decide to request the SRNC to limit the user rate of the downlink of the DCH at any point in time. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to only reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCH Information* IE does not include the *Guaranteed DL Rate* IE, the DRNS shall not limit the user rate of the downlink of the DCH.

[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 DRNC 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 DRNC establishes a transport bearer for the concerned DCH, the DRNC 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 DRNC does not establish a transport bearer for the concerned DCH, the DRNC 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 included in the RADIO LINK SETUP REQUEST message, the DRNC shall establish the requested DSCHs. If the *Transport Layer Address* IE and *Binding ID* IE are included in the DSCH Information IE the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the DSCH. In addition, the DRNC shall send a valid set of DSCH Scheduling Priority IE and MAC-c/sh SDU Length IE parameters to the SRNC in the RADIO LINK SETUP RESPONSE message. If the PDSCH RL ID IE indicates a radio link in the DRNS, then the DRNC shall allocate a DSCH-RNTI to the UE Context and include the DSCH-RNTI IE in the RADIO LINK SETUP RESPONSE message.]

[TDD – If the *DSCH Information* IE is included in the RADIO LINK SETUP REQUEST message, the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related DSCHs.]

[TDD – The DRNC shall include the *DSCH Initial Window Size* IE in the RADIO LINK SETUP RESPONSE message for each DSCH, if the DRNS allows the SRNC to start transmission of MAC-c/sh SDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32].]

[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 DRNS 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 – The DRNS shall use the list of RB Identities in the *RB Info* IE in the *USCH information* IE to map each *RB Identity* IE to the corresponding USCH. If the *Transport Layer Address* IE and *Binding ID* IE are included in the *USCH Information* IE the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the USCH.]

[TDD – If the USCH Information IE is included in the RADIO LINK SETUP REQUEST message, the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related USCHs.]

[TDD – If the USCH Information IE is included in the RADIO LINK SETUP REQUEST message and contains the *TNL QoS* IE, and if ALCAP is not used, the DRNS 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 included in the RADIO LINK SETUP REQUEST message, the DRNS shall establish the requested USCHs, and the DRNC shall provide the [3.84 Mcps TDD – USCH Information Response IE] [1.28 Mcps TDD – USCH Information Response LCR IE] [7.68 Mcps TDD – USCH Information Response 7.68 Mcps IE] in the RADIO LINK SETUP RESPONSE message.]

### [TDD – CCTrCH Handling:]

[TDD – If the *UL CCTrCH Information* IE is present in the RADIO LINK SETUP REQUEST message, the DRNS shall configure the new UL CCTrCH(s) according to the parameters given in the message.]

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

[TDD – If the *DL CCTrCH Information* IE is present in the RADIO LINK SETUP REQUEST message, the DRNS shall configure the new DL CCTrCH(s) according to the parameters given in the message.]

[TDD – If the *TPC CCTrCH List* IE is present in the RADIO LINK SETUP REQUEST message, the DRNS shall configure the identified UL CCTrCHs with TPC according to the parameters given in the message.]

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

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

- The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The DRNC 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 or MIMO with four transmit antennas Activation Indicator IE or Dual Stream MIMO with four transmit antennas 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 DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK SETUP RESPONSE message.
- The DRNC 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 DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow.
- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.
- If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* IE.
- 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 DRNS 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 DRNS 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 DRNS 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 DRNC 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 DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If RADIO LINK SETUP REQUEST message includes HS-DSCH MAC-d PDU Size Format IE in the HS-DSCH Information IE set to the value "Flexible MACd PDU Size", then DRNC 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 I 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 DRNS 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 DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall 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 DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD – HS-SCCH Specific Information Response IE] [1.28Mcps TDD – HS-SCCH Specific Information Response LCR IE] [7.68 Mcps TDD – HS-SCCH Specific Information Response 7.68 Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [TDD The DRNC shall include the [3.84 Mcps TDD HS-PDSCH Timeslot Specific Information Response IE] [1.28 Mcps TDD – HS-PDSCH Timeslot Specific Information Response LCR IE] [7.68 Mcps TDD – HS-PDSCH Timeslot Specific Information Response IE] in the HS-DSCH Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD 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 DRNS shall use the indicated HARQ Preamble Mode as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC 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 DRNC shall not include the *HARQ Preamble Mode Activation Indicator* IE in the RADIO LINK SETUP RESPONSE message.]
- 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 DRNS shall use the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).
- [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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC 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 DRNS 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 SRNC.]
- [FDD If the *MIMO Activation Indicator* IE, or *MIMO with four transmit antennas Activation Indicator* IE, or *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then]
  - [FDD The DRNS shall activate the MIMO mode, or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link.]
  - [FDD The DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO and include the *MIMO Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
  - [FDD If the *Power Offset For S-CPICH for MIMO Request Indicator* IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Information Response*

IE in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]

- [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration are set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Information Response IE in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]
- [1.28 Mcps TDD If the *MIMO Activation Indicator* IE is included in the *HS-DSCH TDD Information* IE, then]
  - [1.28 Mcps TDD The DRNS shall activate the MIMO mode for the HS-DSCH Radio Link.]
  - [1.28 Mcps TDD The DRNS 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 SETUP RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS 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 DRNS 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 DRNS 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 TS 25.321 [41] 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 DRNS 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 DRNS may use the supported HSDPA functions for this UE.]
- [FDD If the UE Support Indicator Extension IE is included in the HS-DSCH FDD Information IE with the bit UE DTXDRX related HS-SCCH orders uniform behavior indicator set to 0, then the DRNS shall, if supported, include the Support of dynamic DTXDRX related HS-SCCH order IE in the HS-DSCH FDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD The DRNS shall include the SixtyfourQAM DL Support Indicator IE in the RADIO LINK SETUP RESPONSE message. This SixtyfourQAM DL Support Indicator IE is related to the HS-DSCH Radio Link.]
- [1.28 Mcps TDD The DRNS shall include the *SixtyfourQAM DL Support Indicator* 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 DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD If the RADIO LINK SETUP REQUEST message includes the UE Aggregate Maximum Bit Rate Enforcement Indicator IE in the Priority Queue Information IE in the HS-DSCH MAC-d Flows

*Information* IE in the *HS-DSCH Information* IE, the DRNS shall, if supported, consider the data of the related HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]

- [FDD If the Single Stream MIMO Activation Indicator IE is included in the HS-DSCH FDD Information IE, then the DRNS shall activate the Single Stream MIMO for the HS-DSCH Radio Link.]
- [1.28 Mcps TDD If the UE TSO Capability LCR IE is included in the HS-DSCH TDD Information IE, then the DRNC may include the TSO HS-PDSCH Indication LCR IE in the RADIO LINK SETUP RESPONSE message if HS-PDSCH resources could be allocated on TSO for the UE.]

### [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 DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE. Non cell specific secondary serving Radio Link and non cell specific secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the HS-DSCH-RNTI IE in the Additional HS Cell Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Secondary Serving Information* IE, then the DRNS 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 DRNC shall include the *Measurement Power Offset* 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 The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall 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 The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* 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 DRNS 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 SRNC.]
- [FDD If the MIMO Activation Indicator IE or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the MIMO mode, or MIMO with four transmit antennas Mode, or Dual Stream MIMO with four transmit antennas Mode for the secondary serving HS-DSCH Radio Link and the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO for the secondary serving HS-DSCH Radio Link and include the MIMO 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 Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Secondary Serving Information Response IE in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for S-CPICH for MIMO IE.]

- [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Information Response IE in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]
- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and more than one secondary serving HS-DSCH Radio Link is setup, then the DRNS shall use this value in the physical layer.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS 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 DRNS 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-DCSH, the DRNS 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 TS 25.321 [41] for
  the secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD The DRNS shall include the *SixtyfourQAM DL Support Indicator* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

### [FDD - Multiflow Setup]:

[FDD - If the *Multiflow Information* IE is present in the RADIO LINK SETUP REQUEST message, then the DRNS shall setup the requested Multiflow operation.]

### [FDD – E-DCH:]

[FDD – If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DCH Minimum Set E-TFCI Validity Indicator* IE the DRNS shall ignore the value in *E-DCH Minimum Set E-TFCI* IE. If the *E-DCH Minimum Set E-TFCI validity indicator* IE is absent DRNS 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 DRNS shall use the value to determine the applicable E-DPDCH power formula defined in TS 25.214 [10]. If the *E-DPDCH Power Interpolation* IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in TS 25.214 [10].]

[FDD – If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the DRNS shall use the information according to TS 25.214 [10]. If the *E-TFCI Boost Information* IE is not present, the DRNS shall use the value "127" in the algorithm defined in TS 25.214 [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 DRNS shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in TS 25.214 [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the UE Context, the DRNS may use the default value defined in TS 25.331 [16]. ]

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

- [FDD The DRNS 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 DRNS 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 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 DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow. The DRNC 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 DRNC 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 DRNC establishes a transport bearer for the concerned E-DCH MAC-d flow, the DRNC 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 DRNC does not establish a transport bearer for the concerned E-DCH MAC-d flow, the DRNC 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 The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [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 MAC-d Flow Specific Information IE in the E-DCH FDD Information IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK SETUP REQUEST message includes UE Aggregate Maximum Bit Rate Enforcement Indicator IE in the E-DCH Logical Channel Information IE in the E-DCH MAC-d Flow Specific Information IE in the E-DCH FDD Information IE, the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]
- [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 DRNS 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 (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [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 DRNS 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 DRNS 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" for an E-DCH MAC-d flow the DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the *TNL QoS* IE is included for a E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD The DRNC 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 DRNC 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 *E-DCH ReferencePower Offset* IE, then the DRNS 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 DRNS 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 contains the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this DRNS:]
  - [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both 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 *RL Information Response* IE for the indicated RL in the RADIO LINK SETUP RESPONSE message.]
  - [FDD The DRNS 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 DRNS 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 If a serving cell change is performed the RADIO LINK SETUP RESPONSE message may contain invalid data (see 9.2.2.4C).]
- [FDD If the DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK SETUP RESPONSE message, then it shall insert the *E-RGCH and E-HICH Channelisation Code Validity Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE, to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]
- [FDD The DRNS 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 a 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 DRNS shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the DRNS 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 DRNS 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 DRNS 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 DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 SRNC.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *SixteenQAM UL Operation Indicator* IE, the DRNS 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 DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]

### [FDD – Additional E-DCH Setup:]

[FDD – If the Additional E-DCH Cell Information RL Setup Req IE is present in the RADIO LINK SETUP REQUEST message, then the Additional E-DCH Cell Information Setup IE defines the new configuration and then:]

- [FDD The DRNS shall setup the E-DCH on the secondary uplink frequency and setup the requested E-DCH resources on the Radio Links and in the cells indicated by the *E-DCH Additional RL ID* IE and the *C-ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE. Non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the UL SIR Target IE in the UL DPCH Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE and/or the DL Power Balancing Information IE and/or the Minimum Reduced E-DPDCH Gain Factor IE in the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE are present, the DRNS shall use the information in the same same way as for the information used on Primary uplink frequency.]
- [FDD If the Secondary UL Frequency Activation State IE is present in the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE, the DRNS shall use the information as initial activation state of the Radio Links on the secondary uplink frequency.]
- [FDD If the *Propagation Delay* IE, the *Initial DL Tx Power* IE, *Primary CPICH Ec/No* IE, the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE and/or the *E-HICH Power Offset* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]

- [FDD If the *Extended Propagation Delay* IE and/or *Enhanced Primary CPICH Ec/No* IE is included in the *Multicell E-DCH RL Specific Information* IE in the *Additional E-DCH Secondary RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the F-DPCH Slot Format Support Request IE in the F-DPCH Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE is included, the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211 [8] and include the F-DPCH Slot Format IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Respone IE in the RADIO LINK SETUP RESPONSE message. If the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE includes the F-DPCH Slot Format IE, the DRNS may use the F-DPCH Slot Format IE to determine the F-DPCH slot format.]
- [FDD If the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the E-DCH Maximum Bitrate IE, the E-DCH Minimum Set E-TFCI IE and/or the E-DCH Processing Overload Level IE are present in the Additional E-DCH FDD Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in same way as for the information used on Primary uplink frequency.]
- [FDD If the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "Separate Iur Transport Bearer Mode" the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]
- [FDD if the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "UL Flow Multiplexing Mode" the DRNS shall use this mode in the new configuration and multiplex MAC-d flows on the transport bearers.]
- [FDD if Separate Iur Transport Bearer Mode is used in the new configuration, then:]
  - [FDD The DRNS shall follow the rules defined in this procedure for single carrier mode of
    operation for establishment of the transport bearer for a MAC-d flow and use the *Transport Bearer Not Requested Indicator* IE in the *RL Specific E-DCH Information* IE in the *RL Information* IE
    received for the corresponding Radio Link(s) of the Primary Uplink Frequency to determine the
    transport bearer configuration in the new configuration for the radio links of the Secondary Uplink
    Frequency.]
  - [FDD If the *Transport Layer Address* IE and *Binding ID* IE is included for an E-DCH MAC-d flow in the *Additional E-DCH MAC-d Flows Specific Information* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, then the DRNS may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow the DRNS shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE in the *Additional E-DCH MAC-d Flow Specific Information Response* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE for establishment of a transport bearer for every E-DCH MAC-d flow being established.]
- [FDD If activation of power balancing for the Additional E-DCH RL by the RADIO LINK SETUP REQUEST message is supported by the DRNS, the DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message to a value that uniquely identifies the RL as a RL Set within the UE Context. The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]
- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the

RADIO LINK SETUP RESPONSE message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]

- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set a same value to the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response IE in the RADIO LINK SETUP RESPONSE message]
- [FDD For every additional E-DCH RL indicated in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the DRNS 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 DRNS may include the corresponding *E-RGCH Signature Sequence* IE for each Additional E-DCH RL in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message and if DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE, then it shall insert the *E-RGCH and E-HICH Channelisation Code* Validity Indicator IE to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]
- [FDD If the Additional Serving E-DCH Radio Link is configured in the DRNS, then:]
  - [FDD The DRNS 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 *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
  - [FDD The DRNS may include in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the Additional serving E-DCH RL and may include the *Default Serving Grant in DTX Cycle 2* IE.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH 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 DRNS shall activate the resources that are allocated for the new additional serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC. If the *Serving Cell Change CFN* IE is not included then the DRNS shall activate immediately the resources that are allocated for the new additional serving E-DCH Radio Link.]
- [FDD If the *D-RNT1* IE was included in the RADIO LINK SETUP REQUEST message the DRNS shall include in the RADIO LINK SETUP RESPONSE message the *Primary Scrambling Code* IE, the *UL UARFCN* IE and the *DL UARFCN* IE for the secondary UL frequency in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If Primary CPICH is not to be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE RADIO LINK SETUP RESPONSE message.]
- [FDD If Secondary CPICH may be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Secondary CPICH Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message. If the DRNS doesn't include the *Secondary CPICH Information* IE, it shall not include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used".]

# [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 DRNS shall ignore the *DCH Information* IE in the RADIO LINK SETUP REQUEST message.]

# [1.28 Mcps TDD - Multi-Carrier E-DCH Setup:]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information* IE is present in the RADIO LINK SETUP REQUEST message, then the *Multi-Carrier E-DCH Information* IE defines the new configuration and then:]

- [1.28Mcps TDD The DRNS shall setup the requested E-DCH resource on the uplink frequecies indicated by the *UARFCN* IE in the *Multi-Carrier E-DCH Information LCR* IE.]
- [1.28Mcps TDD The DRNS shall use the corresponding *PRXdes\_base* IE for power control on each uplink frequency according to TS 25.331 [16].]
- [1.28Mcps TDD If the *SNPL Carrier Group Indicator* IE is present in the *Multi-Carrier E-DCH Information LCR* IE, the DRNS shall use the information to determine which SNPL Carrier Group each frequency indicated by the *UARFCN* IE belongs to.]
- [1.28Mcps TDD If the *Multi-Carrier E-DCH Transport Bearer Mode LCR* IE is set to "Separate Iur transport bearer mode", the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]
- [1.28Mcps TDD If the *Multi-Carrier E-DCH Transport Bearer Mode LCR* IE is set to "E-DCH UL flow multiplexing mode", the DRNS shall use this mode in the new configuration and multiplex MAC-d flow received on the different carriers on one Iur transport bearer.]
- [1.28Mcps TDD If the Separate Iur transport bearer mode is used in the new configuration, then the DRNS shall include the *Binding ID* IE and *Transport Layer Address* IE in the *Multi-Carrier E-DCH Information Response LCR* IE in the RADIO LINK SETUP RESPONSE message for establishment of a transport bearer for every E-DCH MAC-d flow being established.]
- [1.28Mcps TDD If the E-DCH UL flow multiplexing mode is used in the new configuration, then the DRNS shall include the *Binding ID* IE and *Transport Layer Address* IE in the *E-DCH TDD Information Response 1.28Mcps* IE in the RADIO LINK SETUP RESPONSE message for establishment of a transport bearer for every E-DCH MAC-d flow being established.]

# Physical Channels Handling:

# [FDD – Compressed Mode:]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the DRNS 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 DRNS until the next Compressed Mode Configuration is configured in the DRNS or the last Radio Link is deleted.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE, the DRNS shall use the information to activate the indicated Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN* IE refers to latest passed CFN with that value. The DRNS 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 DRNS 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 DRNS 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 DRNS 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 *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 and the UE Context is configured to use DPCH in the downlink, the DRNS shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK SETUP RESPONSE message indicating for each DL Channelisation Code whether the alternative scrambling code shall be used or not.]

[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 UE Context is configured to use F-DPCH in the downlink, the DRNS shall ignore, when activating the Transmission Gap Pattern Sequence(s), the information provided by the *Downlink Compressed Mode Method* IE if included for the concerned Transmission Gap Pattern Sequence(s).]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Affected HS-DSCH serving cell List* IE in the *Active Pattern Sequence Information* IE, the concerned Transmission Gap Pattern Sequence shall be applied to HS-DSCH serving cells associated with *C-ID* IE included in *Affected HS-DSCH serving cell List* IE. Otherwise the concerned Transmission Gap Pattern Sequence shall be applied to all the configured serving cells.]

### [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 TS 25.211 [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 *p*th to "*PhCH number p*".]

### [FDD – Phase Reference Handling:]

[FDD – If Primary CPICH is not to be used as a Phase Reference for this Radio Link, the DRNC shall include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the RADIO LINK SETUP RESPONSE message.]

[FDD – If Secondary CPICH may be used as a Phase Reference for this Radio Link, the DRNC shall include the *Secondary CPICH Information* IE in the RADIO LINK SETUP RESPONSE message.]

[FDD – If the DRNC doesn't include the *Secondary CPICH Information* IE in the RADIO LINK SETUP RESPONSE message, it shall not include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the RADIO LINK SETUP RESPONSE message.]

### [FDD - UL CLTD Handling]:

[FDD - If the *UL CLTD Information* IE is present in the RADIO LINK SETUP REQUEST message, then the DRNS shall setup the requested UL CLTD resources for the concerned UE Context in the cell to determine the precoding weights and then :]

- [FDD If there is neither serving E-DCH RL nor the HS-DSCH RL configuration in the UE Context, the *C-ID* IE shall be included in the *UL CLTD Information* IE, and the DRNS shall configure this cell to determine the precoding weights for the concerned UE Context.]
- [FDD If the *UL CLTD Activation Information* IE is included in the *UL CLTD Information* IE, then the DRNS shall use this value to configure the state of UL CLTD for the concerned UE Context.]

### [FDD – UL MIMO Setup]:

[FDD - If the *UL MIMO Information* IE is present in the RADIO LINK SETUP REQUEST message, then the DRNS shall setup the requested UL MIMO operation.]

### General:

[FDD – If the *Propagation Delay* IE and optionally the *Extended Propagation Delay* IE are included, the DRNS may use this information to speed up the detection of UL synchronisation on the Uu interface.]

[FDD – If the received *Limited Power Increase* IE is set to "Used", the DRNS shall, if supported, use Limited Power Increase according to TS 25.214 [10] subclause 5.2.1 for the inner loop DL power control.]

[TDD – If the RADIO LINK SETUP REQUEST message includes the [1.28 Mcps TDD and 3.84 Mcps TDD – *Maximum Number of DL Physical Channels per Timeslot* IE] [7.68 Mcps TDD – *Maximum Number of DL Physical Channels per Timeslot* 7.68 Mcps IE] the DRNC shall take this value into account when allocating physical resources, otherwise the DRNC can assume that this UE capability is consistent with the other signalled UE capabilities.]

[1.28Mcps TDD – If the RADIO LINK SETUP REQUEST message includes the *Support for 8PSK* IE within the *DL Physical Channel Information* IE or *UL Physical Channel Information* IE, the DRNC shall take this into account in the specified direction when allocating physical resources, otherwise the DRNC can assume that this UE does not support 8PSK resource allocation.]

[1.28Mcps TDD – If the RADIO LINK SETUP REQUEST message includes the *Support for PLCCH* IE within the *DL Physical Channel Information* IE, the DRNC shall take this into account when allocating PLCCH sequence numbers, otherwise the DRNC can assume that this UE does not support PLCCH.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *DL DPCH Information* IE, then the DRNS shall configure the concerned UE 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:]

- [FDD The DRNS shall configure the concerned UE Context to use F-DPCH in the downlink, i.e. with transmission of only the TPC field.]
- [FDD If the *F-DPCH Information* IE includes the *F-DPCH Slot Format Support Request* IE, then the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211 [8] and include the *F-DPCH Slot Format* IE in the RADIO LINK SETUP RESPONSE message. If the *F-DPCH Information* IE includes the *F-DPCH Slot Format* IE, the DRNC may use the *F-DPCH Slot Format* IE to determine the F-DPCH slot format.]

### [FDD – E-DPCH Handling:]

[FDD – If the UL DPDCH Indicator for E-DCH operation IE is included in the UL DPCH Information IE and 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 – Continuous Packet Connectivity Handling:]

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

- [FDD The DRNS shall configure the concerned UE Context for Continuous Packet Connectivity DTX operation according to TS 25.214 [10].]
- [FDD If DRX Information IE is included in the Continuous Packet Connectivity DTX-DRX Information IE, then the DRNS shall configure the concerned UE Context for Continuous Packet Connectivity DRX operation according to TS 25.214 [10].]

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

- [FDD The DRNS 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 TS 25.214 [10].]
- [FDD The DRNS 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 DRNC 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 DRNS shall take account into these parameters to decide the

DRX operation related parameters and configure the concerned UE Context for DRX operation according to TS 25.224 [22] 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 DRNS may use this value to determine the Inactivity Threshold for UE DRX Cycle according to TS 25.224 [22].]

[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 DRNS 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 TS 25.224 [22].]
- [1.28 Mcps TDD The DRNS 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 DRNS shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD The DRNS shall include the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD The DRNS 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 HS-DSCH Semi-Persistent scheduling operation Indicator IE is included in the HS-DSCH Semi-Persistent scheduling Information LCR IE, then the DRNS shall apply this information for HS-DSCH Semi-Persistent scheduling operation.]

[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 DRNS 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 TS 25.224 [22].]
- [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 DRNS shall include *Allcoated E-DCH Semi-persistent resource* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent scheduling Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the DRNS shall apply this information for E-DCH Semi-Persistent scheduling operation.]

### [1.28 Mcps TDD - MU-MIMO Handling:]

[1.28Mcps TDD - If the RADIO LINK SETUP REQUEST message includes the *MU-MIMO Indicator* IE, then:]

- [1.28 Mcps TDD The DRNS may use the MU-MIMO for the radio link according to the *MU-MIMO* Usage Indicator IE and shall include the *MU-MIMO Information* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD If the *Standalone Midamble Channel Indicator* IE is set to "Used", then the DRNS shall include Standalone Midamble Channel information in the RADIO LINK SETUP RESPONSE message. Else, the DRNS shall not include Standalone Midamble Channel information in the RADIO LINK SETUP RESPONSE message.]

### **Radio Link Handling:**

### **Diversity Combination Control:**

[FDD – The *Diversity Control Field* IE indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not.]

- [FDD If the *Diversity Control Field* IE is set to "May" (be combined with another RL), the DRNS shall decide for any of the alternatives.]
- [FDD If the *Diversity Control Field* IE is set to "Must", the DRNS shall combine the RL with one of the other RL.]
- [FDD If the *Diversity Control Field* IE is set to "Must not", the DRNS shall not combine the RL with any other existing RL.]

[FDD – When an RL is to be combined, the DRNS shall choose which RL(s) to combine it with.]

[FDD – The *Diversity Control Field* IE is only applicable for DCHs, in case of E-DCH it shall always be assumed to be set to "May".]

[FDD – In the RADIO LINK SETUP RESPONSE message, the DRNC 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, the DRNC shall]
  - [FDD in case of requested DCHs, 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 in case of requested DCHs, 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 in case of a requested E-DCH, include in the *E-DCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE for which the *Transport Bearer Not Requested Indicator* IE was not included message the *Binding ID* IE and the *Transport Layer Address* IE for the establishment of transport bearers for every E-DCH MAC-d flow being established.]
  - [FDD in case of a requested E-DCH, 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 and part of the same Radio Link Set shall be regarded as the RL with which the concerned E-DCH RL is combined and if the ALCAP is not used, the *Transport Layer Address* IE and the *Binding ID* IE in the RADIO LINK SETUP REQUEST message, shall not be used.]

[TDD – The DRNC shall always include in the RADIO LINK SETUP RESPONSE message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH, DSCH and USCH of the RL.]

In the case of a set of co-ordinated DCHs requiring a new transport bearer the *Binding ID* IE and the *Transport Layer Address* IE shall be included in the RADIO LINK SETUP RESPONSE message 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 – Transmit Diversity:]

[FDD – If the cell in which the RL is being set up is capable to provide Close loop Tx diversity, the DRNC shall include the *Closed Loop Timing Adjustment Mode* IE in the RADIO LINK SETUP RESPONSE message indicating the configured Closed loop timing adjustment mode of the cell.]

[FDD – When the *Diversity Mode* IE is set to "STTD", or "Closed loop mode1", the DRNC shall activate/deactivate the Transmit Diversity for each Radio Link in accordance with the *Transmit Diversity Indicator* 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 DRNS shall apply cell specific transmit diversity configuration and if the Diversity Mode IE is not set to "None" the DRNS 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 – If both the *Initial DL TX Power* IE and *Uplink SIR Target* IE are included in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value. If the value of the *Initial DL TX Power* IE is outside the configured DL TX power range, the DRNS shall apply these constraints when setting the initial DL TX power. The DRNS shall also include the configured DL TX power range defined by *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK SETUP RESPONSE message. The DRNS shall not transmit with a power higher than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH or on the F-DPCH of the RL except, if the UE Context is configured to use DPCH in the downlink, during compressed mode, when the  $\delta P_{curr}$ , as described in TS 25.214 [10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[FDD – If both the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not included in the RADIO LINK SETUP REQUEST message, then DRNC shall determine the initial Uplink SIR Target and include it in the *Uplink SIR Target* IE in the RADIO LINK SETUP RESPONSE message.]

[TDD – The DRNC shall use the *Uplink SIR Target CCTrCH* IEs in the RADIO LINK SETUP RESPONSE message to indicate for any UL CCTrCH an Uplink SIR Target value in case this is deviating from the value included in the *Uplink SIR Target* IE specified for the Radio Link. If in any [3.84Mcps TDD – *UL CCTrCH Information* IE] [1.28Mcps TDD – *UL CCTrCH Information LCR* IE] [7.68Mcps TDD – *UL CCTrCH Information 7.68 Mcps* IE] the *Uplink SIR Target CCTrCH* IE is not included, the value of the *Uplink SIR Target* IE shall apply to the respective UL CCTrCH.]

[FDD – If the *Primary CPICH Ec/No* IE is present, the DRNC should use the indicated value when deciding the Initial DL TX Power. If the *Enhanced Primary CPICH Ec/No* IE is present, the DRNC should use the indicated value when deciding the Initial DL Tx Power.]

[TDD – If [3.84Mcps TDD and 7.68 Mcps TDD – the *DL Time Slot ISCP Info* IE] [1.28Mcps TDD – the *DL Time Slot ISCP Info LCR* IE] is present, the DRNSshould use the indicated value when deciding the Initial DL TX Power for the Radio Link. The DRNS shall use the indicated DL Timeslot ISCP when determining the initial DL power per timeslot as specified in TS 25.224 [22], 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.]

[TDD – If the *Primary CCPCH RSCP Delta* IE is included, the DRNS should assume that the reported value for Primary CCPCH RSCP is in the negative range as per TS 25.123 [24], 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 DRNS should assume that the reported value is in the non-negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS should use the indicated value when deciding the Initial DL TX Power for the Radio Link.]

[3.84 Mcps TDD and 7.68 Mcps TDD – The DL TX power upper and lower limit is configured in the following way:

- The DRNC shall include the Maximum DL TX Power IE and Minimum DL TX Power IE in the RADIO LINK SETUP RESPONSE message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the value(s) for that CCTrCH in the CCTrCH Maximum DL TX Power IE and CCTrCH Minimum DL TX Power IE. The DRNS shall not transmit with

a higher power than indicated by the appropriate *Maximum DL TX Power* IE/*CCTrCH Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE/*CCTrCH Minimum DL TX Power* IE on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD – The DL TX power upper and lower limit is configured in the following way:

- The DRNC shall include the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK SETUP RESPONSE message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the value(s) for that timeslot in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE within the *DL Timeslot Information LCR* IE. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE on any DL DPCH within each timeslot of the RL.]

[1.28McpsTDD – If the *TSTD Support Indicator* IE is present, the DRNS shall apply this information when configuring the transmit diversity for the new radio link.]

[FDD – The DRNS shall start any DL transmission using the indicated DL TX power level (if received) or the decided DL TX power level on each DL channelisation code or on the F-DPCH of a RL until UL synchronisation is achieved on the Uu interface for the concerned RLS or Power Balancing is activated. No inner loop power control or power balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see TS 25.214 [10] subclause 5.2.1.2) and the power control procedure (see 8.3.15).]

[TDD – The DRNS shall start any DL transmission using the decided DL TX power level on each DL channelisation code and on each Time Slot of a RL until UL synchronisation is achieved on the Uu interface for the concerned RL. No inner loop power control shall be performed during this period. Then after UL synchronisation, the DL power shall vary according to the inner loop power control (see TS 25.224 [22] subclause 4.2.3.3).]

[FDD – If the received *Inner Loop DL PC Status* IE is set to "Active", the DRNS shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the DRNS shall deactivate the inner loop DL power control for all RLs according to TS 25.214 [10].]

[FDD – If the *DPC Mode* IE is present in the RADIO LINK SETUP REQUEST message, the DRNC 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 TS 25.214 [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 DRNS shall activate the power balancing, if activation of power balancing by the RADIO LINK SETUP REQUEST message is supported, according to subclause 8.3.15, using the *DL Power Balancing Information* IE. If the DRNS 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 TX Power* IE (if received) or the decided DL TX power level on each DL channelisation code of a RL based on the *Primary CPICH Ec/No* IE or the *Enhanced Primary CPICH Ec/No* IE.]

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

### **Neighbouring Cell Handling:**

If there are UMTS neighbouring cell(s) to the cell in which a Radio Link was established then:

- The DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Neighbouring FDD Cell Information* IE and/or *Neighbouring TDD Cell Information* IE in the *Neighbouring UMTS Cell Information* IE for each neighbouring FDD cell and/or TDD cell respectively. In addition, if the information is available, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Frame Offset* IE, *Primary CPICH Power* IE, *Cell Individual Offset* IE, *STTD Support Indicator* IE, *Closed Loop Mode1 Support Indicator* IE, *Coverage Indicator* IE, *Antenna Co-location Indicator* IE and *HCS Prio* IE in the *Neighbouring FDD Cell Information* IE, and the *Frame Offset* IE, *Cell Individual Offset* IE, *DPCH Constant Value* IE, the *PCCPCH Power* IE, *Coverage Indicator* IE, *Antenna Co-* *location Indicator* IE and *HCS Prio* IE in the *Neighbouring TDD Cell Information* IE or the *Neighbouring TDD Cell Information LCR* IE. If the *Neighbouring TDD Cell Information* IE includes the *Sync Case* IE for the set to "Case1", the DRNC shall include the *Time Slot For SCH* IE in the *Neighbouring TDD Cell Information* IE. If the *Neighbouring TDD Cell Information* IE includes *Sync Case* IE set to "Case2", the DRNC shall include the *SCH Time Slot* IE in the *Neighbouring TDD Cell Information* IE. If the *SCH Time Slot* IE in the *Neighbouring TDD Cell Information* IE. If the *SCH Time Slot* IE in the *Neighbouring TDD Cell Information* IE. If the *SCH Time Slot* IE in the *Neighbouring TDD Cell Information* IE.

- If a UMTS neighbouring cell is not controlled by the same DRNC, the DRNC shall also include in the RADIO LINK SETUP RESPONSE message the CN PS Domain Identifier IE and/or CN CS Domain Identifier IE which are the identifiers of the CN nodes connected to the RNC controlling the UMTS neighbouring cell.
- If the information is available, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *DPC Mode Change Support Indicator* IE for each neighbour cell in the *Neighbouring FDD Cell Information* IE.
- The DRNC shall include the *Cell Capability Container FDD* IE, the *Cell Capability Container TDD* IE, the *Cell Capability Container TDD* LCR IE and/or the *Cell Capability Container Extension FDD* IE if the DRNC is aware that the neighbouring cell supports any functionality listed in 9.2.2.D, 9.2.3.1a, 9.2.3.1b and/or the *Cell Capability Container Extension FDD* IE.
- [FDD The DRNC shall, if supported, include the *Cell List Validity Indicator* IE if the neighbouring cell is multi cell capable and/or dual band capable but the cell can not be the serving HS-DSCH in a multicell and/or dual band configuration. Hence the cell can only serve as the secondary serving HS-DSCH cell. When *Cell List Validity Indicator* IE is included the SRNC should ignore the indicated cell list(s).]
- [FDD For each cell in the *Secondary Serving Cell List* IE that is Multi Cell E-DCH capable, indicated in the *Cell Capability Container Extension FDD* IE by the "Multi Cell E-DCH Support Indicator" bit = "1", and is restricted for use as an Additional E-DCH on the secondary uplink frequency with the cell identified by the *C-ID* IE as the corresponding cell of the primary uplink frequency, the DRNS shall, if supported, include the *Multicell E-DCH Restriction* IE set to "TRUE".]
- For the UMTS neighbouring cells which are controlled by the DRNC, the DRNC shall report in the RADIO LINK SETUP RESPONSE message the restriction state of those cells, otherwise the *Restriction State Indicator* IE may be absent. The DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Restriction State Indicator* IE for the neighbouring cells which are controlled by the DRNC in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.
- If MOCN or GWCN network sharing configuration is used then the DRNC shall include the broadcasted PLMN identities of the concerned neighbouring cells in the *Multiple PLMN List* IE in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.
- If available, the DRNC shall include the *SNA Information* IE for the concerned neighbouring cells in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.
- If available, the DRNC shall include the *Frequency Band Indicator* IE for the concerned neighbouring cells in the *Neighbouring FDD Cell Information* IE.
- If the number of neighbouring UMTS RNCs is beyond the predefined maximum number, the DRNC shall, if supported, include the remaining neighbouring information in the *Neighbouring UMTS Cell Information Extension* IE. The IE filling rules in the Neighbouring UMTS Cell Information shall also apply to the *Neighbouring UMTS Cell Information Extension* IE.

If there are GSM neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Neighbouring GSM Cell Information* IE for each of the GSM neighbouring cells. If available the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Cell Individual Offset* IE, and if the *Cell Individual Offset* IE alone cannot represent the value of the offset, the DRNC shall also include the *Extended GSM Cell Individual Offset* IE in the *Neighbouring GSM Cell Information* IE. If available the DRNC shall also include in the RADIO LINK SETUP RESPONSE message the *Coverage Indicator* IE, *Antenna Co-location Indicator* IE and *HCS Prio* IE in the

*Neighbouring GSM Cell Information* IE. If available, the DRNC shall also include the *SNA Information* IE for the concerned neighbouring cells in the *Neighbouring GSM Cell Information* IE.

When receiving the *SNA Information* IE in the RADIO LINK SETUP RESPONSE message, the SRNC should use it to restrict cell access based on SNA information. See also TS 25.401 [40] for a broader description of the SNA access control.

If there are GERAN neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include the *GERAN Cell Capability* IE in the *Neighbouring GSM Cell Information* IE that is included in the RADIO LINK SETUP RESPONSE message for each of the GERAN cells.

If there are GERAN Iu-mode neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include, if available, the *GERAN Classmark* IE in the *Neighbouring GSM Cell Information* IE that is included in the RADIO LINK SETUP RESPONSE message for each of the GERAN Iu-mode neighbouring cells. TS 43.051 [39] defines when the transmission of the *GERAN Classmark* IE will be required at the initiation of the Relocation Preparation procedure.

If there are E-UTRA neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Neighbouring E-UTRA Cell Information* IE for each of the E-UTRA neighbouring cells.

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

[1.28Mcps TDD – If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC 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 – Shared physical channels Synchronisation Detection:]

[1.28Mcps TDD – If HS-PDSCH and E-PUCH are configured but no DPCH is configured for the UE, then the DRNS shall also include the *Out-of-sync Detection Window* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

### [1.28Mcps TDD – Uplink Timing Advance Control LCR:]

[1.28Mcps TDD – The DRNC shall include the *Uplink Timing Advance Control LCR* IE in the RADIO LINK SETUP RESPONSE message.]

### [1.28Mcps TDD – PowerControl GAP:]

[1.28Mcps TDD – If applied in the DRNS, the DRNC may include the *PowerControl GAP* IE in the RADIO LINK SETUP RESPONSE message.]

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

[1.28Mcps TDD – If the RADIO LINK SETUP REQUEST message includes the *Idle Interval Configuration Indicator* IE, if supported, the DRNC shall include the *Idle Interval Information* IE in the RADIO LINK SETUP RESPONSE message.]

### [1.28Mcps TDD – RNTI Allocation Indicator:]

[1.28Mcps TDD – If the RADIO LINK SETUP REQUEST message includes the *RNTI Allocation Indicator* IE, if supported, the DRNS may allocate an E-RNTI and/or an H-RNTI for UE to use in CELL\_FACH state.]

### [1.28Mcps TDD – Inter-frequency/ Inter-RAT measurement:]

[1.28Mcps TDD – If the RADIO LINK SETUP REQUEST message includes the *DCH Measurement Type indicator* IE, if supported, the DRNS shall include the *Measurement purpose* IE and the *Measurement occasion pattern sequence parameters* IE in the *DCH Measurement Occasion Information* IE in the RADIO LINK SETUP RESPONSE message to configure the measurement occasion pattern(s) indicated by the *DCH Measurement Type indicator* IE.]

### **MBMS Handling:**

If the *MBMS Bearer Service List* IE is included in the RADIO LINK SETUP REQUEST message, the DRNC shall, if supported, perform the UE Linking as specified in TS 25.346 [50], section 5.1.6. If the UE Link is

currently stored in the UE Context or the *MBMS Bearer Service List* IE is included in the RADIO LINK SETUP REQUEST message and if an MBMS session for some MBMS bearer services contained in the UE Link is ongoing in some of the cells identified by the *C-ID* IEs in the RADIO LINK SETUP REQUEST message, the DRNC shall include for each of these active MBMS bearer services in the *Active MBMS Bearer Service List* IE the *Transmission Mode* IE in the concerned *RL Information Response* IEs in the RADIO LINK SETUP REQUEST MESSAGE.

If the UE Link is currently stored in the UE Context or the *MBMS Bearer Service List* IE is included in the RADIO LINK SETUP REQUEST message and if an MBMS preferred frequency layer for some active MBMS bearer services contained in the UE Link is set in some of the cells identified by the *C-ID* IEs in the RADIO LINK SETUP REQUEST message, the DRNC shall include for each of these active MBMS bearer services in the *Active MBMS Bearer Service List* IE the *Preferred Frequency Layer* IE in the concerned *RL Information Response* IEs in the RADIO LINK SETUP REQUE to LINK SETUP READIO LINK SETUP READIO

### [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 DRNS shall if supported preconfigure the indicated cells for Enhanced HS Serving Cell Change according to TS 25.308 [63]: ]

- [FDD The DRNS 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 *Secondary C-ID* IEs 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 TS 25.214 [10].
- [FDD The DRNS shall return these codes in the Sets of HS-SCCH Codes IE along with the corresponding per-cell HS-DSCH-RNTI 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 DRNS 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 SRNC to signal the Target Cell HS-SCCH Order defined in TS 25.331 [16].]
- [FDD The DRNS 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 or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE the Pilot Configuration and MIMO N/M Ratio in *MIMO Information Response* IE.]
  - [FDD if *MIMO with four transmit antennas 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 Pilot Configuration and MIMO N/M Ratio in *MIMO Information Response* IE]

- [FDD if *Dual Stream MIMO with four transmit antennas 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 Pilot Configuration and MIMO N/M Ratio in *MIMO Information Response* 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 preconfiguration, 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 DRNS 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 with the bit UE DTXDRX related HS-SCCH orders uniform behavior indicator set to 0, then the DRNS shall, if supported, include the Support of dynamic DTXDRX related HS-SCCH order IE in the HS-DSCH Preconfiguration Info IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD the SixtyfourQAM DL Support Indicator IE shall be included.]
- [FDD if the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS may store this information in the preconfigured configuration.]
- [FDD the DRNS shall, if supported, include in the Sets of HS-SCCH Codes IE the Measurement Power Offset IE for each preconfigured cell.]
- [FDD The DRNS 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 DRNS 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 DRNS may preconfigure 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 *HS-DSCH Preconfiguration Setup* IE includes the *E-DCH Indicator* IE for a secondary cell, the DRNS shall include in the *Additional E-DCH Preconfiguration Information* IE 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 Additional E-DCH serving cell, corresponding to the cell indicated with the *E-DCH Indicator* IE, according to the rules defined for Serving Additional E-DCH Radio Link Change as follows:]
  - [FDD The DRNS shall allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving Additional 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 DRNS may preconfigure the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving Additional E-DCH RL and include these values in the *E-DCH FDD DL Control Channel Information* IE.]

- [FDD – If the Power Offset For S-CPICH for MIMO Request 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 DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where HS-DSCH / secondary HS-DSCH is preconfigured, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH Preconfiguration Info IE or in the Sets of HS-SCCH Codes IE in the HS-DSCH Preconfiguration Info IE for each preconfigured cell in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO 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 DRNS", the DRNC 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 DRNS", the DRNC 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 DRNS or New Serving RL Not in the DRNS", the DRNC 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.]
- [FDD if the Additional E-DCH Non-Serving RL Preconfiguration Setup IE is included, the DRNC may include the New non-serving RL E-DCH FDD DL Control Channel Information A IE, the New nonserving 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 according to the choice of new Serving RL in Additional E-DCH New non-serving RL E-DCH FDD DL Control Channel Information IE for the additional non serving E-DCH 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 DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the DCH or the set of co-ordinated DCHs [FDD – for every DCH being established for which the *Transport Bearer Not Requested Indicator* IE was not included].

If no *D-RNTI* IE was included in the RADIO LINK SETUP REQUEST message, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *D-RNTI* IE, the *CN PS Domain Identifier* IE and/or the *CN CS Domain Identifier* IE for the CN domains (using LAC and RAC of the current cell) to which the DRNC is connected.

[1.28 Mcps TDD – If no *D-RNTI* IE was included in the RADIO LINK SETUP REQUEST message, the DRNC could include in the RADIO LINK SETUP RESPONSE message the *UARFCN* IE.]

[FDD – If the *D-RNTI* IE was included in the RADIO LINK SETUP REQUEST message the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Primary Scrambling Code* IE, the *UL UARFCN* IE and the *DL UARFCN* IE.]

[TDD – If the *D*-*RNTI* IE was included in the RADIO LINK SETUP REQUEST message the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *UARFCN* IE, the *Cell Parameter ID* IE and the *SCTD Indicator* IE.]

[3.84Mcps TDD and 7.68 Mcps TDD – If the *D-RNTI* IE was included in the RADIO LINK SETUP REQUEST message the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Sync Case* IE and if the *Sync Case* IE is set to "Case 2", the DRNC shall also include the *SCH Time Slot* IE in the RADIO LINK SETUP RESPONSE message. If the included *Sync Case* IE is set to "Case1", the DRNC shall also include the *Time Slot* For SCH IE.]

[3.84Mcps TDD – The DRNC shall include the Secondary CCPCH Info TDD IE in the RADIO LINK SETUP RESPONSE message if at least one DSCH Information Response IE or USCH Information Response IE is included in the message and at least one DCH is configured for the radio link. The DRNC shall also include the Secondary CCPCH Info TDD IE in the RADIO LINK SETUP RESPONSE message if at least one DSCH Information Response IE or USCH Information Response IE is included in the message and the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[1.28 Mcps TDD – The DRNC shall include the Secondary CCPCH Info TDD LCR IE in the RADIO LINK SETUP RESPONSE message if at least one DSCH Information Response LCR IE or USCH Information Response LCR IE is included in the message and at least one DCH is configured for the radio link. The DRNC shall also include the Secondary CCPCH Info TDD LCR IE in the RADIO LINK SETUP RESPONSE message if at least one DSCH Information Response LCR IE or USCH Information Response LCR IE is included in the message and the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[7.68 Mcps TDD – The DRNC shall include the *Secondary CCPCH Info* 7.68*Mcps TDD* IE in the RADIO LINK SETUP RESPONSE message if at least one *DSCH Information Response* 7.68 *Mcps* IE or *USCH Information Response* 7.68 *Mcps* IE is included in the message and at least one DCH is configured for the radio link. The DRNC shall also include the *Secondary CCPCH Info* 7.68*Mcps TDD* IE in the RADIO LINK SETUP RESPONSE message if at least one *DSCH Information Response* 7.68 *Mcps* IE or *USCH Information Response* 7.68 *Mcps* IE is included in the message and the SHCCH Info Set IE or USCH Information Response 7.68 *Mcps* IE is included in the message and the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

For each Radio Link established in a cell in which at least one URA Identity is being broadcast, the DRNC shall include in the URA Information IE within the RADIO LINK SETUP RESPONSE message URA Information for this cell including the URA ID IE, the Multiple URAs Indicator IE indicating whether or not multiple URA Identities are being broadcast in the cell, and the RNC-ID Iesof all other RNCs that have at least one cell within the URA identified by the URA ID IE.

Depending on local configuration in the DRNS, the DRNC may include in the RADIO LINK SETUP RESPONSE message the *UTRAN Access Point Position* IE and the geographical co-ordinates of the cell, represented either by the *Cell GAI* IE or by the *Cell GA Additional Shapes* IE. If the DRNC includes the *Cell GA Additional Shapes* IE in the RADIO LINK SETUP RESPONSE message, it shall also include the *Cell GAI* IE.

If the DRNS need to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) when starting to utilise a new Radio Link, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

If the DRNS need to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) when starting to utilise a new Radio Link, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

If the *Permanent NAS UE Identity* IE is included in the RADIO LINK SETUP REQUEST message, the DRNS shall store the information for the considered UE Context for the life-time of the UE Context.

If the RADIO LINK SETUP REQUEST message includes the *Permanent NAS UE Identity* IE and a *C-ID* IE corresponding to a cell reserved for operator use, the DRNS shall use this information to determine whether it can set up a Radio Link on this cell or not for the considered UE Context.

If the HCS priority information is available in the DRNS, it shall include the *HCS Prio* IE for each of the established RLs in the RADIO LINK SETUP RESPONSE message.

The DRNS shall start receiving on the new RL(s) after the RLs are successfully established.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Cell Portion ID* IE, the DRNS shall use this information when it decides to use beamforming for the new RL.]

[1.28 Mcps TDD – If the RADIO LINK SETUP REQUEST message includes the *Cell Portion LCR ID* IE, the DRNS shall use this information when it decides to allocate physical resource for the new RL.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Initial DL DPCH Timing Adjustment Allowed* IE, then the DRNS 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 DRNS 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 *D-RNTI* IE which already has a RL and *Synchonisation Indicator* IE, the DRNC shall ignore the value in the *Frame Offset* IE and *Chip Offset* IE in the RADIO LINK SETUP REQUEST message and shall include in the *Frame Offset* IE and *Chip Offset* IE the values used for already established RL in the RADIO LINK SETUP RESPONSE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *F-TPICH Information* IE in the *RL Information* IE, the DRNS shall use this information to configure the F-TPICH of the RL according to TS 25.211 [7] and TS 25.214 [10], and shall include the *F-TPICH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

# [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 DRNS shall use the *First RLS Indicator* IE 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 TS 25.214 [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 DRNS shall assign to the RL a unique value for the *RL Set ID* IE which uniquely identifies the RL as an RL Set within the UE Context. In case of E-DCH, the generation of E-HICH related information for RLs in different RL Set(s) shall not be common.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign to each RL the same value for the *RL Set ID* IE which uniquely identifies these RLs as members of the same RL Set within the UE 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 oout-of-sync algorithm defined in TS 25.214 [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 TS 25.214 [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 DRNS would contain the E-DCH serving RL, the DRNS 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 SRNC to identify the E-DCH RLs that have or can have a common generation of E-RGCH information.]

# [TDD- E-DCH:]

[TDD – If the [3.84Mcps – *E-DCH Information* IE][1.28Mcps – *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 DRNS 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 DRNS 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 DRNC may use the transport layer address and the binding identifier received from the SRNC 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 DRNS 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 DRNS shall assume non-scheduled grants are configured for that E-DCH MAC-d flow.]
- [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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [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 DRNS 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 DRNS 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.]
- [3.84Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [7.68Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information 7.68Mcps* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information LCR* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [TDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the [3.84Mcps TDD E-DCH TDD Information IE][1.28Mcps TDD – E-DCH TDD Information LCR IE] in the E-DCH MAC-d Flows Information TDD IE, then the DRNS 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 DRNS shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]

- [3.84Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information TDD* IE in the *E-DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [3.84Mcps TDD The DRNS 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 SETUP RESPONSE message.]
- [1.28Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information LCR TDD* IE in the *E-DCH Information Response* 1.28Mcps IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD The DRNS shall allocate an E-RNTI identifier and include the E-RNTI identifier, the E-AGCH(s) and E-HICH(s) assigned in the *E-DCH Information Response 1.28Mcps* IE in the RADIO LINK SETUP RESPONSE message.]
- [7.68Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information*7.68Mcps TDD IE in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK SETUP RESPONSE message.]
- [7.68Mcps TDD The DRNS shall allocate an E-RNTI identifier and include the E-RNTI identifier and the E-AGCH(s) assigned in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *Multi-Carrier E-DCH Physical Layer Category LCR* IE in the *E-DCH TDD Information LCR* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for multi-carrier E-DCH scheduling.]
- [1.28Mcps TDD If the UE TSO Capability LCR IE in the UE Capabilities Information IE in the HS-DSCH Information IE is not present and if the RADIO LINK SETUP REQUEST message includes the UE TSO Capability LCR IE in the E-DCH TDD Information LCR IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

# **Response Message:**

Upon receipt of the RADIO LINK SETUP REQUEST message, the DRNS allocates the requested type of channelisation codes and other physical channel resources for each RL and assigns a binding identifier and a transport layer address for each DCH, for each set of co-ordinated DCHs [TDD – and for each DSCH and USCH]. This information shall be sent to the SRNC in the RADIO LINK SETUP RESPONSE message when all the RLs have been successfully established.

[1.28 Mcps TDD – if the DRNS assigns one or more PLCCH sequence numbers to the radio link, then the PLCCH assignment(s) shall be sent to the SRNC in the RADIO LINK SETUP RESPONSE message.]

After sending the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation on the Uu interface and start reception on the new RL.

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

- [FDD start transmission on the DL DPDCH(s) of the new RL as specified in TS 25.427 [4].]
- [TDD start transmission on the new RL immediately as specified in TS 25.427 [4].]

For each RL for which the *Delayed Activation* IE is included in the RADIO LINK SETUP REQUEST message, the DRNS 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 TS 25.427 [4], however never before the CFN indicated in the *Activation CFN* IE.]

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- [TDD – start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in TS 25.427 [4].]

# 8.3.1.3 Unsuccessful Operation

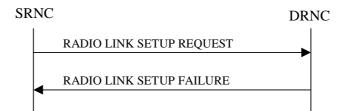


Figure 6: Radio Link Setup procedure: Unsuccessful Operation

If the establishment of at least one radio link is unsuccessful, the DRNC shall respond with a RADIO LINK SETUP FAILURE message. The DRNC shall include in the RADIO LINK SETUP FAILURE message a general *Cause* IE or a *Cause* IE for each failed radio link. The *Cause* IE indicates the reason for failure.

[FDD – If some radio links were established successfully, the DRNC shall indicate this in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message.]

If the RADIO LINK SETUP REQUEST message includes a *C-ID* IE corresponding to a cell reserved for operator use and the *Permanent NAS UE Identity* IE is not present, the DRNC shall reject the procedure and send the RADIO LINK SETUP FAILURE message.

[FDD – If the RL identified by the *HS-PDSCH RL ID* IE is a radio link in the DRNS and this RL is successfully established, then the DRNC shall allocate a HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE, the *HS-DSCH FDD Information Response* IE and the *SixtyfourQAM DL Support Indicator* IE in the RADIO LINK SETUP FAILURE message. This *SixtyfourQAM DL Support Indicator* IE is related to the HS-DSCH Radio Link.]

[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 DRNS and this RL is successfully established, then the DRNC shall allocate a HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE, the *HS-DSCH FDD Secondary Serving Information Response* IE and the *SixtyfourQAM DL Support Indicator* 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 DRNC 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.]

[1.28 Mcps TDD – If the RL identified by the *HS-PDSCH RL ID* IE is a radio link in the DRNS and this RL is successfully established, then the DRNC shall allocate a HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE, the *HS-DSCH TDD Information Response* IE and the *SixtyfourQAM DL Support Indicator* IE in the RADIO LINK SETUP FAILURE message.]

[FDD – If the *MIMO Activation Indicator* IE is included and the *Power Offset For S-CPICH for MIMO Request Indicator* IE is not included in the *HS-DSCH FDD Information* IE in the RADIO LINK SETUP REQUEST message but MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the setup of the serving HS-DSCH Radio Link shall be reported as failed and the DRNC shall include in the RADIO LINK SETUP FAILURE message the *Cause* IE.]

[FDD – If the *MIMO with four transmit antennas Activation Indicator* IE or the *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included and the *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is not included in the *HS-DSCH FDD Information* IE in the RADIO LINK SETUP REQUEST message but MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the setup of the serving HS-DSCH Radio Link shall be reported as failed and the DRNC shall include in the RADIO LINK SETUP FAILURE message the *Cause* IE.]

[FDD – If the RL identified by the *E-DCH Additional RL ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE is a radio link in the DRNS and this RL is successfully established, then the DRNS shall include the *Additional E-DCH FDD Information Response* IE in the *Additional E-*

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DCH Cell Information Response IE in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message. If the establishment of the RL identified by the *E-DCH Additional RL ID* IE is unsuccessful, then the DRNS shall indicate the unsuccessful setup of the Additional E-DCH 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 *E-DCH Additional RL ID* IE in the Additional E-DCH Cell Information Setup IE.]

Typical cause values are:

## **Radio Network Layer Causes:**

[FDD – UL Scrambling Code Already in Use;] DL Radio Resources not Available; UL Radio Resources not Available; [FDD – Combining Resources not available;] Combining not Supported Requested Configuration not Supported; Cell not Available; [FDD – Requested Tx Diversity Mode not Supported;] Power Level not Supported; Number of DL codes not supported; Number of UL codes not supported; Dedicated Transport Channel Type not Supported; DL Shared Channel Type not Supported; [TDD – UL Shared Channel Type not Supported;] [FDD – UL Spreading Factor not Supported;] [FDD – DL Spreading Factor not Supported;] CM not Supported: [FDD – DPC mode change not Supported;] Cell reserved for operator use; Delayed Activation not supported; E-DCH not supported; [FDD – F-DPCH not supported;] [FDD - Continuous Packet Connectivity DTX-DRX operation not Supported;] [FDD - Continuous Packet Connectivity HS-SCCH less operation not Supported;] [FDD – MIMO not supported;] [FDD – E-DCH TTI2ms 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 - SixteenQAM UL not Supported;] HS-DSCH MAC-d PDU Size Format not supported; [FDD - F-DPCH Slot Format operation not supported;] E-DCH MAC-d PDU Size Format not available; [FDD – E-DPCCH Power Boosting not supported;] [FDD – SixtyfourQAM DL and MIMO Combined not available;] [FDD – Multi Cell operation not available;] [FDD – Multi Cell operation not supported;] [FDD – Multi Cell operation with MIMO not available;] [FDD – Multi Cell operation with MIMO not supported;] [FDD – Single Stream MIMO not supported;] [FDD – Single Stream MIMO not available;] [FDD – TX diversity for MIMO UE on DL Control Channels not available;] [FDD – Multi Cell E-DCH Operation not supported;] [FDD – Multi Cell E-DCH Operation not available;] [FDD – Multi Cell operation with Single Stream MIMO not available;] [FDD – Multi Cell operation with Single Stream MIMO not supported;] [FDD – Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available;] [FDD - Cell Specific Tx Diversity Handling For Multi Cell Operation Not Supported;] [FDD – Frequency Specific Compressed Mode Not Available;] [FDD – Uplink Closed Loop Transmit Diversity Operation Not Available;] [FDD - Uplink Closed Loop Transmit Diversity Operation Not Supported;]

[FDD – MIMO with four transmit antennas not supported;]

- [FDD MIMO with four transmit antennas not available;]
- [FDD Dual Stream MIMO with four transmit antennas not supported;]
- [FDD Dual Stream MIMO with four transmit antennas not available;]
- [FDD Multiflow Operation Not Available;]
- [FDD Multiflow Operation Not Supported;]
- [FDD SixtyfourQAM UL not Available;]
- [FDD SixtyfourQAM UL not Supported;]
- [FDD UL MIMO Operation Not Available;]
- [FDD UL MIMO Operation Not Supported;]
- [FDD UL MIMO and SixteenQAM Operation Not Available;]
- [FDD UL MIMO and SixteenQAM Operation Not Supported;]
- [FDD UL MIMO and SixtyfourQAM Operation Not Available;]
- $\label{eq:FDD-UL} [FDD-UL\ MIMO\ and\ SixtyfourQAM\ Operation\ Not\ Supported.]$

# **Transport Layer Causes:**

Transport Resource Unavailable.

#### **Miscellaneous Causes:**

Control Processing Overload; HW Failure; Not enough User Plane Processing Resources.

# 8.3.1.4 Abnormal Conditions

If the DRNC receives either an S-RNTI or a D-RNTI which already has RL(s) established [FDD – and the *Synchronisation Indicator* IE is not included in the RADIO LINK SETUP message,] the DRNC shall send the RADIO LINK SETUP FAILURE message to the SRNC, indicating the reason for failure.

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

[FDD – If the RADIO LINK SETUP REQUEST message includes both the *Initial DL TX Power* IE and the *Primary CPICH Ec/No* IE or does not include either of these IEs, then the DRNC 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 DRNS shall reject the Radio Link Setup procedure and shall respond with a RADIO LINK SETUP FAILURE message.

[FDD – If only the *Initial DL TX Power* IE or the *Uplink SIR Target* IE is included in the RADIO LINK SETUP REQUEST message, then DRNC shall reject the Radio Link Setup procedure and shall respond with the 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 DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Enhanced Primary CPICH Ec/No* IE, but not the *Primary CPICH Ec/No* IE, then the DRNC 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 [FDD – or in the *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 in the DRNS], the DRNC shall reject the Radio Link Setup procedure and the DRNC shall 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 nor *RL Specific E-DCH Information* IE in the *RL* 

*Information* IE for a specific RL and the *Diversity Control Field* IE is set to "May", the DRNC 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 DRNC 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 the first RL 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 DRNC 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 DRNC 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 DRNC shall reject the Radio Link Setup procedure and respond with the RADIO LINK SETUP FAILURE message.]

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport bearer intended to be established, the DRNC shall reject the Radio Link Setup procedure and the DRNC shall respond with the RADIO LINK SETUP FAILURE message.

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

[FDD – If the RADIO LINK SETUP REQUEST message includes the *F-DPCH Information* IE and the *DL DPCH Information* IE, then the DRNS 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 DRNC 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 DRNC 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 DRNC 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 DRNC 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 DRNS 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 DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Synchronisation Indicator* IE for a RL, but does not contain the *D-RNTI* IE which already has the RL, the DRNC 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 DRNC 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 DRNC 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 DRNC 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", the *Additional HS Cell Information RL Setup* IE, the *MIMO with four transmit antennas Activation Indicator* IE, the *Dual Stream MIMO with four transmit antennas Activation Indicator* IE and/or the *Single Stream MIMO Activation Indicator* IE, but does not contain the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size", then the DRNC 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 DRNC 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 in the RL Specific E-DCH Information for the new Serving E-DCH RL, the DRNC 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 or an E-DCH MAC-d Flow for a specific RL and the specific RL is combined with RL which the transport bearer is configured to be established for the DCH or the E-DCH MAC-d Flow, previously listed in the RADIO LINK SETUP RESPONSE message in the DRNS, the DRNC 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 indicating a seconadry serving cell that is not in the same Node B as the new serving HS-DSCH cell, then the DRNC 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 DRNC 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 DRNC 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 DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.

[FDD – If the RADIO LINK SETUP REQUEST message contains more than one of a *MIMO Activation Indicator* IE, a *MIMO with four transmit antennas Activation Indicator* IE, a *Dual Stream MIMO with four transmit antennas Activation Indicator* IE and a *Single Stream MIMO Activation Indicator* IE in the *HS-DSCH FDD Information* IE or in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Setup* IE, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message contains the Additional E-DCH Cell Information RL Setup Req IE and if the E-DPCH Information IE is not present, then the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Additional E-DCH Cell Information RL Setup Req* 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 DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message contains the Additional E-DCH Cell Information RL Setup Req IE and the C-ID IE is not included in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS 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 DRNS 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 containing more than one secondary serving HS-DSCH RL, and all secondary serving HS-DSCH RLs in the new configuration will not be assigned consecutive ordinal numbers starting with the value "1", which are received in the Ordinal Number Of Frequency IE in the in the HS-DSCH FDD Secondary Serving Information IE, the DRNS 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 containing more than one secondary serving HS-DSCH RL, the new configuration also contains an Additional E-DCH Serving Radio Link and the secondary serving HS-DSCH Radio link, which is configured in the same cell as the Additional E-DCH Serving Radio Link does not have Ordinal Number Of Frequency value "1", the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message contains the *Affected HS-DSCH serving cell List* IE in the *Active Pattern Sequence Information* IE, and the Transmission Gap Pattern Sequence for affected HS-DSCH Serving Cells is activated on the HS-DSCH Primary Serving Cell but not for all the other serving cells, the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message with the cause value "Invalid CM settings".]

[FDD - If the RADIO LINK SETUP REQUEST message contains the *UL MIMO Information* IE but does not contain the *UL CLTD Information* IE, then the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message contains more than one of a *MIMO Activation Indicator* IE, a *MIMO with four transmit antennas Activation Indicator* IE, a *Dual Stream MIMO with four transmit antennas Activation Indicator* IE in *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

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# 8.3.2 Radio Link Addition

# 8.3.2.1 General

This procedure is used for establishing the necessary resources in the DRNS for one [FDD - or more] additional RLs towards a UE when there is already at least one RL established to the concerned UE via this DRNS.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Radio Link Addition procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

[TDD – The Radio Link Addition procedure serves to establish a new Radio Link with the DSCH and USCH included, if they existed before.]

# 8.3.2.2 Successful Operation

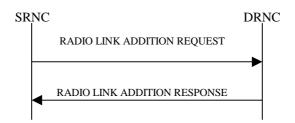


Figure 7: Radio Link Addition procedure: Successful Operation

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the SRNC to the DRNC.

Upon receipt, the DRNS 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 DRNS shall prioritise resource allocation for the RL(s) to be established according to Annex A.

If the *UE Aggregate Maximum Bit Rate* IE is contained in the RADIO LINK ADDITION REQUEST message, the DRNS shall, if supported, store the received UE Aggregate Maximum Bit Rate parameters to control the aggregate data rate of non GBR traffic for this UE.

### **Transport Channel Handling:**

[3.84 Mcps TDD – The DRNC shall include the *UL/DL DPCH Information* IE within the *UL/DL CCTrCH Information* IE for each CCTrCH that requires DPCHs.]

[1.28 Mcps TDD – The DRNC shall include the *UL/DL DPCH Information LCR* IE within the *UL/DL CCTrCH Information LCR* IE for each CCTrCH that requires DPCHs.]

[7.68 Mcps TDD – The DRNC shall include the *UL/DL DPCH Information* 7.68 Mcps IE within the *UL/DL CCTrCH Information* 7.68 Mcps IE for each CCTrCH that requires DPCHs.]

# [TDD – DSCH:]

[3.84 Mcps TDD – If the radio link to be added includes a DSCH, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a *DSCH Information Response* IE for each DSCH.]

[1.28 Mcps TDD – If the radio link to be added includes a DSCH, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a *DSCH Information Response LCR* IE for each DSCH.]

[7.68 Mcps TDD – If the radio link to be added includes a DSCH, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a *DSCH Information Response* 7.68 *Mcps* IE for each DSCH.]

# [TDD – USCH:]

[3.84 Mcps TDD – If the radio link to be added includes any USCHs, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a *USCH Information Response* IE for each USCH.]

[1.28 Mcps TDD – If the radio link to be added includes any USCHs, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a *USCH Information Response LCR* IE for each USCH.]

[7.68 Mcps TDD – If the radio link to be added includes any USCHs, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a *USCH Information Response* 7.68 *Mcps* IE for each USCH.]

# **Physical Channels Handling:**

## [FDD –Compressed Mode:]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Active Pattern Sequence Information* IE, the DRNS shall use the information to activate the indicated (all ongoing) Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN* IE refers to the latest passed CFN with that value. The DRNS 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 DRNS 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 DRNS 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 DRNS 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 ADDITION REQUEST message includes the *Active Pattern Sequence Information* IE and the concerned UE Context is configured to use F-DPCH in the downlink, the DRNS shall ignore, when activating the Transmission Gap Pattern Sequence(s), the downlink compressed mode method information, if existing, for the concerned Transmission Gap Pattern Sequence(s) in the Compressed Mode Configuration.]

[FDD – If the *Active Pattern Sequence Information* IE is not included, the DRNS shall not activate the ongoing compressed mode pattern in the new RLs, but the ongoing pattern in the existing RL shall be maintained.]

[FDD – If some Transmission Gap Pattern sequences using SF/2 method are initialised in the DRNS and the UE Context is configured to use DPCH in the downlink, the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the *DL Code Information* IE in the RADIO LINK ADDITION RESPONSE message to indicate the Scrambling code change method that it selects for each channelisation code.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Affected HS-DSCH serving cell List* IE in the *Active Pattern Sequence Information* IE, the concerned Transmission Gap Pattern Sequence shall be applied to HS-DSCH serving cells associated with *C-ID* IE included in *Affected HS-DSCH serving cell List* IE. Otherwise the concerned Transmission Gap Pattern Sequence shall be applied to all the configured serving cells.]

## [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 TS 25.211 [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 *p*th to "*PhCH number p*".]

# [TDD – CCTrCH Handling:]

[TDD – If the *UL CCTrCH Information* IE is present, the DRNS 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 Uplink Step Size* IE, the DRNS 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 DRNS 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 Downlink Step Size* IE, the DRNS 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.]

# [FDD - UL CLTD Handling]:

[FDD - If the *UL CLTD Information* IE is present in the RADIO LINK ADDITION REQUEST message, then the DRNS shall setup the requested UL CLTD resources for the concerned UE Context in the cell to determine the precoding weights and then :]

- [FDD If there is neither serving E-DCH RL nor the HS-DSCH RL configuration in the UE Context, the *C-ID* IE shall be included in the *UL CLTD Information* IE, and the DRNS shall configure this cell to determine the precoding weights for the concerned UE Context.]
- [FDD If there is a HS-DSCH RL configuration in the concerned UE Context, the *UL CLTD Activation Information* IE shall be included in the *UL CLTD Information* IE, then the DRNS shall use this value to configure the state of UL CLTD for the concerned UE Context.]

# [FDD – UL MIMO Setup]:

[FDD - If the *UL MIMO Information* IE is present in the RADIO LINK SETUP REQUEST message, then the DRNS shall setup the requested UL MIMO operation.]

#### General:

[FDD – The DRNS shall use the provided Uplink SIR Target value as the current target for the inner-loop power control.]

#### **Radio Link Handling:**

#### **Diversity Combination Control:**

The *Diversity Control Field* IE indicates for each RL whether the DRNS shall combine the new RL with existing RL(s) or not on the Iur.

- If the *Diversity Control Field* IE is set to "May" (be combined with another RL), the DRNS shall decide for any of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the DRNS shall combine the RL with one of the other RL. When a new RL is to be combined the DRNS shall choose which RL(s) to combine it with.
- If the *Diversity Control Field* IE is set to "Must not", the DRNS shall not combine the RL with any other existing RL.

[FDD – The *Diversity Control Field* IE is only applicable for DCHs, in case of E-DCH it shall always be assumed to be set to "May".]

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 DRNC 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 DRNC 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 the *Transport Bearer Not Setup Indicator* IE for every DCH or set of co-ordinated DCHs 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 – In case of not combining E-DCH, the *E-DCH FDD Information Response* IE shall be included in the RADIO LINK ADDITION RESPONSE message containing the *Binding ID* IE and the *Transport Layer Address* IE for the establishment of transport bearers for every E-DCH MAC-d flow being established for which the *Transport Bearer Not Requested Indicator* IE was not included.]

[FDD – In case of not combining E-DCH, the DRNC shall include in the RADIO LINK ADDITION RESPONSE 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 ADDITION REQUEST message.]

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 DRNC shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that the RL is combined. 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 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.

[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 and part of the same Radio Link Set shall be regarded as the RL with which the concerned E-DCH RL is combined and if the ALCAP is not used, the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific E-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 case E-DCH RL is established for the first time, the DRNC shall include *E-DCH FDD 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 RL for which the *Transport Bearer Not Requested Indicator* IE was not included.]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the Additional E-DCH Cell Information RL Add Req IE, then:]

- [FDD if the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "Separate Iur Transport Bearer Mode" the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]
- [FDD if the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "UL Flow Multiplexing Mode" the DRNS shall use this mode in the new configuration and multiplex MAC-d flows on the transport bearers.]
- [FDD if Separate Iur Transport Bearer Mode is used in the new configuration, then:]
  - [FDD the DRNS shall follow the rules defined in this procedure for single carrier mode of operation for establishment of the transport bearer for a MAC-d flow and use the *Transport Bearer Not Requested Indicator* IE in the *RL Specific E-DCH Information* IE in the *RL Information* IE received for the corresponding Radio Link(s) of the Primary Uplink Frequency to determine the transport bearer configuration in the new configuration for the radio links of the Secondary Uplink Frequency.]
  - [FDD If the Transport Layer Address IE and Binding ID IE is included for an E-DCH MAC-d flow in the Additional E-DCH MAC-d Flows Specific Information IE in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE or in the Additional E-DCH RL Specific Information To Add IE in the Additional E-DCH Cell Information Addition IE, then the DRNS may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow the DRNS shall, for establishment of the transport bearer, include in the RADIO LINK

ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE in the *Additional E-DCH MAC-d Flow Specific Information Response* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE for establishment of the transport bearer.]

[TDD – The DRNC shall always 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 of the RL.]

In the case of a set of co-ordinated DCHs, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and the *Transport Layer Address* IE for only one of the DCHs in the set of co-ordinated DCHs [FDD – for which the *Transport Bearer Not Requested Indicator* IE was not included].

If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) when starting to utilise a new Radio Link, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) when starting to utilise a new Radio Link, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

#### [FDD – Transmit Diversity:]

[FDD – The DRNS shall activate any feedback mode diversity according to the received settings.]

[FDD – If the cell in which the RL is being added is capable to provide Close loop Tx diversity, the DRNC shall indicate the Closed loop timing adjustment mode of the cell by including the *Closed Loop Timing Adjustment Mode* IE in the RADIO LINK ADDITION RESPONSE message.]

[FDD – When 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 present the DRNS 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 using the diversity mode of the existing Radio Link(s) and/or existing secondary serving HS-DSCH Radio Link.]

## **DL Power Control:**

[FDD – If the *Primary CPICH Ec/No* IE or the *Primary CPICH Ec/No* IE and the *Enhanced Primary CPICH Ec/No* IE measured by the UE are included for an RL in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power for this RL. If the *Primary CPICH Ec/No* IE is not present, the DRNS shall set the Initial DL TX Power based on the power relative to the Primary CPICH power used by the existing RLs.]

[TDD – If [3.84Mcps TDD and 7.68 Mcps TDD – the *DL Time Slot ISCP Info* IE] [1.28Mcps TDD – the *DL Time Slot ISCP Info LCR* IE] is included in the RADIO LINK ADDITION REQUEST message, the DRNS shall use it in the calculation of the Initial DL TX Power.]

[TDD – If the *Primary CCPCH RSCP Delta* IE is included, the DRNS shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per TS 25.123 [24], 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 DRNS shall assume that the reported value is in the non-negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE is included, the DRNS shall assume that the reported value is in the non-negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS shall use it in the calculation of the Initial DL TX Power.]

[TDD – If the *Primary CCPCH RSCP* IE, *Primary CCPCH RSCP Delta* IE, [3.84Mcps TDD and 7.68 Mcps TDD – and the *DL Time Slot ISCP Info* IE] [1.28Mcps TDD – and the *DL Time Slot ISCP Info* LCR IE] are not present, the DRNS shall set the Initial DL TX Power based on the power relative to the Primary CCPCH power used by the existing RL.]

[FDD – The Initial DL TX Power shall be applied until UL synchronisation is achieved on the Uu interface for that RLS or Power Balancing is activated. No inner loop power control or power balancing shall be

performed during this period. The DL power shall then vary according to the inner loop power control (see TS 25.214 [10] subclause 5.2.1.2) and the power control procedure (see 8.3.7).]

[TDD – The Initial DL TX Power shall be applied until UL synchronisation is achieved on the Uu interface for that 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 TS 25.224 [22] subclause 4.2.3.3).]

[3.84 Mcps TDD and 7.68 Mcps TDD – The DL TX power upper and lower limit is configured in the following way: The DRNC shall include the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK ADDITION RESPONSE message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power* IE and *CCTrCH Minimum DL TX Power*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE/*CCTrCH Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE/*CCTrCH Minimum DL TX Power* IE on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD – The DL TX power upper and lower limit is configured in the following way: The DRNC shall include the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK ADDITION RESPONSE message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the value(s) for that timeslot in the *Maximum DL TX Power* IE and *Minimum DL TX Power* within the *DL Timeslot Information LCR* IE. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower IE

[FDD – If the *DPC Mode* IE is present in the RADIO LINK ADDITION REQUEST message, the DRNC 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 ADDITION REQUEST message, DPC mode 0 shall be applied (see TS 25.214 [10]).]

The DRNC shall provide the configured *Maximum DL TX Power* IE and *Minimum DL TX Power* IE for every new RL to the SRNC in the RADIO LINK ADDITION RESPONSE message. The DRNS shall not transmit with a power higher than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH [FDD – or on the F-DPCH] of the RL [FDD – except, if the UE Context is configured to use DPCH in the downlink, during compressed mode, when the  $\delta P_{curr}$ , as described in TS 25.214 [10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[FDD – If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Individual" in the existing RL(s) and the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power* IE, the DRNS 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 by the DRNS, according to subclause 8.3.15. In this case, the DRNC shall include the *DL Power Balancing Activation Indicator* IE in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message. If the DRNS 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 which is calculated based on the *Primary CPICH Ec/No* IE (if received), or to the power level which is calculated based on the power relative to the Primary CPICH power used by the existing RLs.]

# **UL Power Control:**

The DRNC shall also provide the configured UL Maximum SIR and UL Minimum SIR for every new RL to the SRNC in the RADIO LINK ADDITION RESPONSE message. These values are taken into consideration by DRNS admission control and shall be used by the SRNC as limits for the UL inner-loop power control target.

### **Neighbouring Cell Handling:**

If there are UMTS neighbouring cell(s) to the cell in which a Radio Link was established then:

- The DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Neighbouring FDD Cell Information* IE and/or *Neighbouring TDD Cell Information* IE in the *Neighbouring UMTS Cell Information* IE for each neighbouring FDD cell and/or TDD cell respectively. In addition, if the information is available, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the Frame Offset IE, Primary CPICH Power IE, Cell Individual Offset IE, STTD Support Indicator IE, Closed Loop Mode1 Support Indicator IE, Coverage Indicator IE, Antenna Co-location Indicator IE and HCS Prio IE in the Neighbouring FDD Cell Information IE, and the Frame Offset IE, Cell Individual Offset IE, DPCH Constant Value IE and the PCCPCH Power IE, Coverage Indicator IE, Antenna Colocation Indicator IE and HCS Prio IE in the Neighbouring TDD Cell Information IE or the Neighbouring TDD Cell Information LCR IE. If the Neighbouring TDD Cell Information IE includes the Sync Case IE set to "Case1", the DRNC shall include the Time SlotFor SCH IE in the Neighbouring TDD Cell Information IE. If the Neighbouring TDD Cell Information IE set to "Case2", the DRNC shall include the SCH Time Slot IE in the Neighbouring TDD Cell Information IE.

- If a UMTS neighbouring cell is not controlled by the same DRNC, the DRNC shall also include in the RADIO LINK ADDITION RESPONSE message the *CN PS Domain Identifier* IE and/or *CN CS Domain Identifier* IE which are the identifiers of the CN nodes connected to the RNC controlling the UMTS neighbouring cell.
- [FDD The DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *DPC Mode Change Support Indicator* IE for each neighbour cell in the *Neighbouring FDD Cell Information* IE if this information is available.]
- The DRNC shall include the *Cell Capability Container FDD* IE, the *Cell Capability Container TDD* IE, *Cell Capability Container 7.68Mcps TDD* IE, the *Cell Capability Container TDD LCR* IE and/or the *Cell Capability Container Extension FDD* IE if the DRNC is aware that the neighbouring cell supports any functionality listed in 9.2.2.D, 9.2.3.1a, 9.2.3.1b and 9.2.2.123.
- [FDD The DRNC shall, if supported, include the *Cell List Validity Indicator* IE if the neighbouring cell is multi cell capable and/or dual band capable but the cell can not be the serving HS-DSCH in a multicell and/or dual band configuration. Hence the cell can only serve as the secondary serving HS-DSCH cell. When *Cell List Validity Indicator* IE is included the SRNC should ignore the indicated cell list(s).]
- [FDD For each cell in the *Secondary Serving Cell List* IE that is Multi Cell E-DCH capable, indicated in the *Cell Capability Container Extension FDD* IE by the "Multi Cell E-DCH Support Indicator" bit = "1", and is restricted for use as an Additional E-DCH on the secondary uplink frequency with the cell identified by the *C-ID* IE as the corresponding cell of the Primary uplink frequency, the DRNS shall, if supported, include the *Multicell E-DCH Restriction* IE set to "TRUE".]
- For the UMTS neighbouring cells which are controlled by the DRNC, the DRNC shall report in the RADIO LINK ADDITION RESPONSE message the restriction state of those cells, otherwise *Restriction State Indicator* IE may be absent. The DRNC shall include the *Restriction State Indicator* IE for the neighbouring cells which are controlled by the DRNC in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.
- If available, the DRNC shall include the *SNA Information* IE for the concerned neighbouring cells in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.
- If MOCN or GWCN network sharing configuration is used then the DRNC shall include the broadcasted PLMN identities of concerned neighbouring cells in the *Multiple PLMN List* IE in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.
- If available, the DRNC shall include the *Frequency Band Indicator* IE for the concerned neighbouring cells in the *Neighbouring FDD Cell Information* IE.
- If the number of neighbouring UMTS RNCs is beyond the predefined maximum number, the DRNC shall, if supported, include the remaining neighbouring information in the *Neighbouring UMTS Cell Information Extension* IE. The IE filling rules in the Neighbouring UMTS Cell Information shall also apply to the *Neighbouring UMTS Cell Information Extension* IE.

If there are GSM neighbouring cells to the cell(s) in which a radio link is established, the DRNC shall include the *Neighbouring GSM Cell Information* IE in the RADIO LINK ADDITION RESPONSE message for each of the GSM neighbouring cells. If available the DRNC shall include the *Cell Individual Offset* IE, and if the *Cell Individual Offset* IE alone cannot represent the value of the offset, the DRNC shall also include the *Extended GSM Cell Individual Offset* IE in the *Neighbouring GSM Cell Information IE*. If available the DRNC shall also include the *DRNC* shall also *DRNC* shall als

the *Neighbouring GSM Cell Information* IE. If available, the DRNC shall also include the *SNA Information* IE for the concerned neighbouring cells in the *Neighbouring GSM Cell Information* IE.

When receiving the *SNA Information* IE in the RADIO LINK ADDITION RESPONSE message, the SRNC should use it to restrict cell access based on SNA information. See also TS 25.401 [40] for a broader description of the SNA access control.

If there are GERAN neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include the *GERAN Cell Capability* IE in the *Neighbouring GSM Cell Information* IE that is included in the RADIO LINK ADDITION RESPONSE message for each of the GERAN cells.

If there are GERAN Iu-mode neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include, if available, the *GERAN Classmark* IE in the *Neighbouring GSM Cell Information* IE that is included in the RADIO LINK ADDITION RESPONSE message for each of the GERAN Iu-mode neighbouring cells. TS 43.051 [39] defines when the transmission of the *GERAN Classmark* IE will be required at the initiation of the Relocation Preparation procedure.

If there are E-UTRA neighbouring cells to the cell(s) in which a radio link is established, the DRNC shall include the *Neighbouring E-UTRA Cell Information* IE in the RADIO LINK ADDITION RESPONSE message for each of the E-UTRA neighbouring cells.

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

[1.28Mcps TDD – If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC 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 – Shared physical channels Synchronisation Detection:]

[1.28Mcps TDD – If HS-PDSCH and E-PUCH are configured but no DPCH is configured for the UE, then the DRNS shall include the *Out-of-sync Detection Window* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITON RESPONSE message.]

## [1.28Mcps TDD – Uplink Timing Advance Control LCR:]

[1.28Mcps TDD – The DRNC shall include the *Uplink Timing Advance Control LCR* IE in the RADIO LINK ADDITION RESPONSE message.]

# [1.28Mcps TDD – PowerControl GAP:]

[1.28Mcps TDD – If applied in the DRNS, the DRNC may include the *PowerControl GAP* IE in the RADIO LINK ADDITION RESPONSE message.]

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

[1.28Mcps TDD – If the RADIO LINK ADDITION REQUEST message includes the *Idle Interval Configuration Indicator* IE, if supported, the DRNC shall include the *Idle Interval Information* IE in the RADIO LINK ADDITION RESPONSE message.]

#### [1.28Mcps TDD – Inter-frequency/ Inter-RAT measurement:]

[1.28Mcps TDD – If the RADIO LINK ADDTION REQUEST message includes the *DCH Measurement Type indicator* IE, if supported, the DRNS shall include the *Measurement purpose* IE and the *Measurement occasion pattern sequence parameters* IE in the *DCH Measurement Occasion Information* IE in the RADIO LINK ADDTION RESPONSE message to configure the measurement occasion pattern(s) indicated by the *DCH Measurement Type indicator* IE.]

## **MBMS Handling:**

If the UE Link is currently stored in the UE Context and an MBMS session for some MBMS bearer services contained in the UE Link is ongoing in some of the cells identified by the *C-ID* IEs in the RADIO LINK ADDITION REQUEST message, the DRNC shall include for each of these active MBMS bearer services in the *Active MBMS Bearer Service List* IE the *Transmission Mode* IE in the concerned *RL Information Response* IEs in the RADIO LINK ADDITION RESPONSE message.

If the UE Link is currently stored in the UE Context and an MBMS preferred frequency layer for some active MBMS bearer services contained in the UE Link is set in some of the cells identified by the *C-ID* IEs in the RADIO LINK ADDITION REQUEST message, the DRNC shall include for each of these active MBMS bearer services in the *Active MBMS Bearer Service List* IE the *Preferred Frequency Layer* IE in the concerned *RL Information Response* IEs in the RADIO LINK ADDITION RESPONSE message.

## [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-PDSCH RL ID* IE in the *HS-DSCH Serving Cell Change Information* IE the DRNS shall, if supported, preconfigure the indicated cells for Enhanced HS Serving Cell Change acoording to TS 25.308 [63]:]

- [FDD The DRNS 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* Iesin 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 TS 25.214 [10].
- [FDD The DRNS shall return these codes in the Sets of HS-SCCH Codes IE along with the corresponding per- cell HS-DSCH-RNTI 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 DRNS shall use the first in the numbered list the primary serving HS-DSCH cell's of HS-SCCH codes in the HS-SCCH Preconfigured Codes IE sent to the SRNC to signal the Target Cell HS-SCCH Order defined in TS 25.331 [16]].
- [FDD The DRNS 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 or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE the Pilot Configuration and MIMO N/M Ratio in *MIMO Information Response* IE.]
  - [FDD if *MIMO with four transmit antennas 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 Pilot Configuration and MIMO N/M Ratio in *MIMO Information Response* IE]
  - [FDD if *Dual Stream MIMO with four transmit antennas 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 Pilot Configuration and MIMO N/M Ratio in *MIMO Information Response* 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 preconfiguration 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 DRNS 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 with the bit UE DTXDRX related HS-SCCH orders uniform behavior indicator set to 0, then the DRNS shall, if supported, include the Support of dynamic DTXDRX related HS-SCCH order IE in the HS-DSCH Preconfiguration Info IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD the SixtyfourQAM DL Support Indicator IE may be included.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS may store this information in the preconfigured configuration.]
- [FDD the DRNS shall, if supported, include in the *Sets of HS-SCCH Codes* IE the *Measurement Power Offset* IE for each preconfigured cell.]
- [FDD If the Power Offset For S-CPICH for MIMO Request 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 DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where HS-DSCH / secondary HS-DSCH is preconfigured, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH Preconfiguration Info IE or in the Sets of HS-SCCH Codes IE in the HS-DSCH Preconfiguration Info IE for each preconfigured cell in the RADIO LINK ADDITION RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]

[FDD – The DRNS 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 DRNS 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 DRNS may preconfigure 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 *HS-DSCH Preconfiguration Setup* IE includes the *E-DCH Indicator* IE for a secondary cell, the DRNS shall include in the *Additional E-DCH Preconfiguration Information* IE 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* IE containing the preconfiguration of the Additional E-DCH serving cell, corresponding to the cell indicated with the *E-DCH Indicator* IE, according to the rules defined for Serving Additional E-DCH Radio Link Change as follows:]

[FDD – The DRNS shall allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving Additional 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 DRNS may preconfigure the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving Additional 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 DRNS", the DRNC 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 DRNS", the DRNC 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 DRNS or New Serving RL Not in the DRNS", the DRNC may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE, the *New non-serving E-DCH FDD DL Control Channel Information B* IE and/or the *New non-serving 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.]
- [FDD if the Additional E-DCH Non-Serving RL Preconfiguration Setup IE is included, the DRNC may include the New non-serving RL E-DCH FDD DL Control Channel Information A IE, the New nonserving 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 according to the choice of new Serving RL in Additional E-DCH New non-serving RL E-DCH FDD DL Control Channel Information IE for the additional non serving E-DCH 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 DRNC may use the transport layer address and the binding identifier received from the SRNC 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 DRNC 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 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 DRNC establishes a transport bearer for the concerned DCH, the DRNC 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 DRNC does not establish a transport bearer for the concerned DCH, the DRNC shall
  include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH in the RADIO LINK
  ADDITION RESPONSE message.]

Depending on local configuration in the DRNS, the DRNC may include in the RADIO LINK ADDITION RESPONSE message the *UTRAN Access Point Position* IE and the geographical co-ordinates of the cell, represented either by the *Cell GAI* IE or by the *Cell GA Additional Shapes* IE. If the DRNC includes the *Cell GA Additional Shapes* IE in the RADIO LINK ADDITION RESPONSE message, it shall also include the *Cell GAI* IE.

For each Radio Link established in a cell in which at least one URA Identity is being broadcast, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a URA Information for this cell including the *URA ID* IE, the *Multiple URAs Indicator* IE indicating whether or not multiple URA Identities are being broadcast in the cell, and the *RNC-ID* IEs of all other RNCs that have at least one cell within the URA identified by the *URA ID* IE.

[3.84Mcps TDD – The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK ADDITION RESPONSE message if at least one *DSCH Information Response* IE or *USCH Information Response* IE is included in the message and at least one DCH is configured for the radio link. The DRNC shall also include the *Secondary CCPCH Info TDD* IE in the RADIO LINK ADDITION RESPONSE message if at least one *DSCH Information Response* IE is included in the message and the secondary *CCPCH Info TDD* IE or *USCH Information Response* IE is included in the message and the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[1.28 Mcps TDD – The DRNC shall include the *Secondary CCPCH Info TDD LCR* IE in the RADIO LINK ADDITION RESPONSE message if at least one *DSCH Information Response LCR* IE or *USCH Information Response LCR* IE is included in the message and at least one DCH is configured for the radio link. The DRNC shall also include the *Secondary CCPCH Info TDD LCR* IE in the RADIO LINK ADDITION RESPONSE message if at least one *DSCH Information Response LCR* IE or *USCH Information Response LCR* IE is included in the message and the SHCCH Info TDD LCR IE in the RADIO LINK ADDITION RESPONSE message if at least one *DSCH Information Response LCR* IE or *USCH Information Response LCR* IE is included in the message and the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[7.68 Mcps TDD – The DRNC shall include the Secondary CCPCH Info 7.68 Mcps TDD IE in the RADIO LINK ADDITION RESPONSE message if at least one DSCH Information Response 7.68 Mcps IE or USCH Information Response 7.68 Mcps IE is included in the message and at least one DCH is configured for the radio link. The DRNC shall also include the Secondary CCPCH Info 7.68 Mcps TDD IE in the RADIO LINK ADDITION RESPONSE message if at least one DSCH Information Response 7.68 Mcps IE or USCH Information Response 7.68 Mcps IE is included in the message and the SHCCH message for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

If the *Permanent NAS UE Identity* IE is present in the RADIO LINK ADDITION REQUEST message, the DRNS shall store the information for the considered UE Context for the lifetime of the UE Context.

If the RADIO LINK ADDITION REQUEST message includes a *C-ID* IE corresponding to a cell reserved for operator use and the Permanent NAS UE Identity is available in the DRNC for the considered UE Context, the DRNC shall use this information to determine whether it can add the Radio Link on this cell or not.

If the HCS priority information is available in the DRNS, it shall include the *HCS Prio* IE for each of the established RLs in the RADIO LINK ADDITION RESPONSE message.

The DRNS shall start receiving 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 DRNS 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 DRNS 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 DRNS shall use synchronisation procedure B according to subclause 4.3.2.4 in TS 25.214 [10]. The DRNS 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 TS 25.214 [10].]

[FDD – If the UE Context is configured for F-DPCH Slot Format operation, then the DRNS shall include the *F-DPCH Slot Format* IE in the RADIO LINK ADDITION RESPONSE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *F-TPICH Information* IE in the *RL Information* IE, the DRNS shall use this information to configure the F-TPICH of the RL according to TS 25.211 [7] and TS 25.214 [10], and shall include the *F-TPICH Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

## [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 DRNS shall assign to the RL a unique value for the *RL Set ID* IE which uniquely identifies the RL as an RL Set within the UE Context. In case of E-DCH, the generation of E-HICH 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 DRNS shall assign to each RL the same value for the *RL Set ID* IE which uniquely identifies

these RLs as members of the same RL Set within the UE Context. In case of E-DCH, the generation of E-HICH related 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 TS 25.214 [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 TS 25.214 [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 DRNS would contain the E-DCH serving RL, the DRNS 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 SRNC 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 the *HS-PDSCH RL ID* IE indicates the new Serving HS-DSCH Radio Link:]

- [FDD In the new configuration the DRNS shall allocate the HS-PDSCH resources for the new Serving HS-PDSCH Radio Link.]
- [FDD The DRNS 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 If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* IE.]
- [FDD The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNS 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 The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- [FDD If the *HS-DSCH Serving Cell Change Information* IE includes the *Continuous Packet Connectivity HS-SCCH less Information* IE, then:]
  - [FDD The DRNS 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 TS 25.214 [10].]
  - [FDD The DRNS 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 ADDITION RESPONSE message.]
  - [FDD If at least one of *HS-PDSCH Second Code Support* IE is set to "True", then the DRNC 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 DRNS shall configure the concerned UE Context for Continuous Packet Connectivity DTX operation according to TS 25.214 [10].]
  - [FDD If *DRX Information* IE is included in the *Continuous Packet Connectivity DTX-DRX Information* IE, then the DRNS shall configure the concerned UE Context for Continuous Packet Connectivity DRX operation according to TS 25.214 [10].]
- [FDD If the UE 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 DRNS 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 If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the DRNS shall
  include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Information Response* IE in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message if
  it decides to use the octet aligned table defined in TS 25.321 [41] for HS-DSCH Transport Block Size
  signalling.]

# [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 DRNS 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 DRNS to be used on the new HS-DSCH Radio Link.]
- [FDD The DRNC 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 or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH Information IE.]
- [FDD The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.]
- [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 DRNS 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 DRNS 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 DRNS 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 DRNC 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 DRNS allows the SRNC to start transmission of MAC-d PDUs

before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. 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 DRNC 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 I 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 DRNS 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 HARQ Preamble Mode IE in the HS-DSCH Information IE, then the DRNS shall use the indicated HARQ Preamble Mode as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC 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 DRNC 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 DRNS shall use the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).]
- [FDD If the *MIMO* Activation Indicator IE, or *MIMO* with four transmit antennas Activation Indicator IE, or *Dual Stream MIMO* with four transmit antennas Activation Indicator IE is included in the *HS*-DSCH FDD Information IE, then ]
  - [FDD The DRNS shall activate the MIMO mode, or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link.]
  - [FDD The DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO and include the *MIMO Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD If the Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Information Response IE. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
  - [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Information Response IE in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS 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 DRNS 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 DRNS shall include the HS-DSCH TB Size Table Indicator IE in the HS-DSCH FDD Information Response IE in the HS-DSCH Serving Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] 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 DRNS 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 DRNS may use the supported HSDPA functions for this UE.]
  - [FDD If the UE Support Indicator Extension IE is included in the HS-DSCH FDD Information IE with the bit UE DTXDRX related HS-SCCH orders uniform behavior indicator set to 0, then the D shall, if supported, include the Support of dynamic DTXDRX related HS-SCCH order 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 *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 DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the UE Aggregate Maximum Bit Rate Enforcement Indicator IE in the Priority Queue Information IE in the HS-DSCH MAC-d Flows Information IE in the HS-DSCH Information IE, then the DRNS shall, if supported, consider the data of the HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]
- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE in the *HS-DSCH Serving Cell Change Information* IE, then the DRNS shall activate the Single Stream MIMO for the HS-DSCH Radio Link.]
- [FDD The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK ADDITION REQUEST message, then the DRNS 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 SRNC, or earlier. In this case, in the new configuration the DRNS shall, if applicable, de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link. The DRNS 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 DRNS 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 Serving HS-DSCH Radio Link Change was successful or unsucessful, the DRNS shall
  indicate this in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION
  RESPONSE message.]

# [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 the *HS-PDSCH RL ID* IE indicates the new Serving HS-DSCH Radio Link:]

- [FDD In the new configuration the DRNS 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 secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [FDD The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* 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 The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNS 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 The DRNC shall include the HS-PDSCH And HS-SCCH Scrambling Code 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 UE 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 DRNS 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 If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH, the DRNS 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 Change Information Response IE in the RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for the secondary serving HS-DSCH Transport Block Size signalling.]

# [FDD – Secondary Serving HS-DSCH Setup on a New Radio Link at Serving HS-DSCH Radio Link Change:]

- [FDD The DRNS 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 DRNS to be used on the new secondary serving HS-DSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific secondary serving 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 in the Additional HS Cell Information RL Addition IE, then the DRNS 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 MIMO Activation Indicator IE, or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the MIMO mode, or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link and the Node B shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO and include the MIMO 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 *Power Offset For S-CPICH for MIMO Request Indicator* IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Information Response* IE. If zero power offset the DRNC may include the *Power Offset For S-CPICH for S-CPICH for S-CPICH for S-CPICH for MIMO* IE.]
- [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Information Response IE. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]

- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS 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 DRNS 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 cell, the DRNS 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 TS 25.321 [41] for secondary serving 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 DRNS shall apply cell specific transmit diversity configuration and if the *Diversity Mode* IE is not set to "None" the DRNS 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 in the RADIO LINK ADDITION REQUEST message, then the DRNS 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 SRNC, or earlier. In this case, in the new configuration the DRNS shall, if applicable, de-allocate the HS-PDSCH resources of the old secondary serving HS-PDSCH Radio Link. The DRNS 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 DRNS shall activate immediately the resources that are allocated for the new secondary serving HS-PDSCH Radio Link, and shall keep active the resources that are allocated for the previous secondary serving HS-PDSCH Radio Link.]
- [FDD If the requested secondary serving HS-DSCH Radio Link Change was successful or unsuccessful, the DRNS 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 - Multiflow Setup]:

[FDD - If the *Multiflow Information* IE is present in the RADIO LINK SETUP REQUEST message, then the DRNS shall setup the requested Multiflow operation.]

# [FDD – Additional Serving E-DCH Radio Link Change:]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Additional E-DCH Cell Information Addition* IE in the *Additional E-DCH Cell Information RL Add Req* IE and the *HS-PDSCH RL ID* IE in the *Additional HS Cell Information RL Addition* IE, the *HS-PDSCH RL ID* IE indicates the new Additional Serving E-DCH Radio Link:]

- [FDD In the new configuration the DRNS shall allocate the E-DCH resources for the new additional serving E-DCH Radio Link on the secondary UL frequency. Non cell specific E-DCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the old Additional Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Additional Serving E-DCH Radio Link at the activation of the new configuration.]
- [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Additional 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 *Additional E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

- [FDD The DRNS may include in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH Serving Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message the Serving Grant Value IE and Primary/Secondary Grant Selector IE for the initial grant for the additional serving E-DCH RL and may include the Default Serving Grant in DTX Cycle 2 IE.]
- [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNS 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 Additional 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 DRNS Communication Context that have not been included in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE.]
- [FDD If the Serving Cell Change CFN IE is included in the RADIO LINK ADDITION REQUEST message, then the DRNS shall activate the resources that are allocated for the new additional serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC, or earlier. In this case, in the new configuration the DRNS shall, if applicable, de-allocate the E-AGCH resources of the old Additional Serving E-DCH Radio Link. The DRNS 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 DRNS shall activate immediately the resources that are allocated for the new additional serving E-DCH Radio Link, and shall keep active the resources that are allocated for the previous additional serving E-DCH Radio Link.]
- [FDD If the addition of the requested Additional Serving E-DCH Radio Link was successful but the Additional Serving E-DCH Radio Link change was unsuccessful, the DRNS shall indicate this in the Additional E-DCH Serving 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 DRNS shall setup the E-DCH resources as configured in the UE context.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *RL specific E-DCH 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 DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.]
- [FDD The DRNC 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 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 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 DRNC 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 DRNC establishes a transport bearer for the concerned E-DCH MAC-d flow, the DRNC 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 DRNC does not establish a transport bearer for the concerned E-DCH MAC-d flow, the DRNC 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 The DRNC 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 DRNC may include the corresponding E-RGCH Signature Sequence IE in the E-DCH FDD DL Control
  Channel Information IE in the RADIO LINK ADDITION 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 ADDITION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS 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 DRNS 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 DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK ADDITION RESPONSE message, then it shall insert the *E-RGCH and E-HICH Channelisation Code Validity Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE, to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]

# [FDD – Serving E-DCH Radio Link Change:]

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Serving E-DCH RL* IE, this indicates the new Serving E-DCH Radio Link:]

- [FDD If the new Serving E-DCH RL is in this DRNS:]
  - [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both 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 for the indicated RL in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The DRNS 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 DRNS 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 If a serving cell change is performed the RADIO LINK ADDITION RESPONSE message may contain invalid data (see 9.2.2.4C).]
  - [FDD The DRNS 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 DRNS 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 Link in the DRNS 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 DRNS 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 SRNC, or earlier. In this case, in the new configuration the DRNS shall, if applicable, de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link. The DRNS 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 DRNS shall activate immediately the resources that are allocated for the new serving E-DCH Radio Link, and shall keep active the resources that are allocated for the previous 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 DRNS 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 DRNS to be used on the new E-DCH Radio Link and the DRNS 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-TFCI Boost Information* IE, the DRNS shall use the information according to TS 25.214 [10]. If the *E-TFCI Boost Information* IE is not present, the DRNS shall use the value "127" in the algorithm defined in TS 25.214 [10].]

[FDD – If the *E-DPCH Information* IE includes the *E-TFCS Information* IE, the DRNS shall use the *E-TFCS Information* IE for the E-DCH when reserving resources for the uplink of the new configuration. The DRNS 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 Validity Indicator* IE the DRNS shall ignore the value in *E-DCH Minimum Set E-TFCI* IE. If the *E-DCH Minimum Set E-TFCI validity indicator* IE is absent DRNS 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 DRNS shall use the value to determine the applicable E-DPDCH power formula defined in TS 25.214 [10]. If the *E-DPDCH Power Interpolation* IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in TS 25.214 [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 DRNS shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in TS 25.214 [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the UE Context, the DRNS may use the default value defined in TS 25.331 [16]. ]

### [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 then:]

- [FDD the *E-DCH FDD Information* IE defines the new E-DCH FDD configuration in the DRNS 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 DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE, then the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]
- [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 DRNS 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 (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [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 DRNS shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the DRNS 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 DRNS shall assume nonscheduled 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 DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [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 DRNS 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 *Bundling Mode Indicator* IE for a 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 DRNS shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the DRNS 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 DRNS 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 DRNS 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 DRNS shall notify the SRNC 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]

### [FDD – Additional E-DCH Setup:]

[FDD – If the Additional E-DCH Cell Information RL Add Req IE is present in the RADIO LINK ADDITION REQUEST message and the choice of Setup Or Addition Of E-DCH On Secondary UL Frequency is "Setup", then the Additional E-DCH Cell Information Setup IE defines the new configuration and then:]

- [FDD If the *C-ID* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *C-ID* IE indicates the cell in which the additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the Additional E-DCH on the secondary uplink frequency and setup the requested Additional E-DCH resources on the Radio Links and in the cells indicated by the *E-DCH Additional RL ID* IE and the *C-ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD If the *C-ID* IE is not included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *E-DCH Additional RL ID* IE indicates the existing RL on which the Additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the Additional E-DCH on the Radio Links indicated by the *E-DCH Additional RL ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD The DRNS shall use for the non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the UL SIR Target IE in the UL DPCH Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE and/or the DL Power Balancing Information IE and/or the Minimum Reduced E-DPDCH Gain Factor IE in the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE are present, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the Secondary UL Frequency Activation State IE is present in the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE, the DRNS shall use the information as initial activation state of the Radio Links on the secondary uplink frequency.]
- [FDD If the Initial DL Tx Power IE, the Primary CPICH Ec/No IE, the E-AGCH Power Offset IE, the E-RGCH Power Offset IE and/or the E-HICH Power Offset IE, is included in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the *Enhanced Primary CPICH Ec/No* IE is included in the *Multicell E-DCH RL Specific Information* IE in the *Additional E-DCH Secondary RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- If the F-DPCH Slot Format Support Request IE in the F-DPCH Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE is included, the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211 [8] and include the F-DPCH Slot Format IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RL Add IE in the RADIO LINK ADDITION RESPONSE message. If the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE includes the F-DPCH Slot Format IE, the DRNS may use the F-DPCH Slot Format IE to determine the F-DPCH slot format.]
- [FDD If the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the E-DCH Maximum Bitrate IE, the E-DCH Minimum Set E-TFCI IE and/or the E-DCH Processing Overload Level IE are present in the Additional E-DCH FDD Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If activation of power balancing for the Additional E-DCH RL by the RADIO LINK ADDITION REQUEST message is supported by the DRNS, the DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE in the RADIO LINK ADDITION RESPONSE message.]

- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message to a value that uniquely identifies the RL as a RL Set within the UE Context. The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]
- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]
- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set a same value to the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD For every additional E-DCH RL indicated in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE the DRNS 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 DRNS may include the corresponding E-RGCH Signature Sequence IE and the DRNS may include the corresponding E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RL Add IE in the RADIO LINK ADDITION RESPONSE message and if DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE, then it shall insert the E-RGCH and E-HICH Channelisation Code Validity Indicator IE to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]
- [FDD If the Additional Serving E-DCH Radio Link is configured in the DRNS, then:]
  - [FDD The DRNS 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 *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The DRNS may include in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE in the RADIO LINK ADDITION RESPONSE message the the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the Additional serving E-DCH RL and may include the *Default Serving Grant in DTX Cycle 2* IE.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant E-DCH FDD Information Response* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD If the Serving Cell Change CFN IE is included in the RADIO LINK ADDITION REQUEST message, then the DRNS shall activate the resources that are allocated for the new additional serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC. If the Serving Cell Change CFN IE is not included then the DRNS shall activate immediately the resources that are allocated for the new additional serving E-DCH Radio Link]
- [FDD If Primary CPICH is not to be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE RADIO LINK ADDITION RESPONSE message.]
- [FDD If Secondary CPICH may be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Secondary CPICH Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE in the RADIO LINK ADDITION RESPONSE message. If the DRNS doesn't include the *Secondary CPICH Information* IE, it shall

not include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used".]

# [FDD – Additional E-DCH RL Addition:]

[FDD – If the *Additional E-DCH Cell Information RL Add Req* IE is present in the RADIO LINK ADDITION REQUEST message and the choice of *Setup Or Addition Of E-DCH On Secondary UL Frequency* is "Addition", then the *Additional E-DCH Cell Information Addition* IE defines the new configuration and then:]

- [FDD The DRNS shall setup the requested E-DCH resources as requested, or as configured in the UE context, on the Radio Links indicated by the *E-DCH Additional RL ID* IE in the *Additional E-DCH RL Specific Information To Add* IE. Non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD if the *Multicell E-DCH Information* IE is included and contains the *Minimum Reduced E-DPDCH Gain Factor* IE, the DRNS shall use the information in the same way as for the information used on the Primary uplink frequency.]
- [FDD if the Additional E-DCH FDD Information IE is included and contains the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the E-DCH Maximum Bitrate IE, the E-DCH Minimum Set E-TFCI IE and/or the E-DCH Processing Overload Level IE, the DRNS shall use the information in the same way as for the information used on the Primary uplink frequency.]
- [FDD If the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE and/or the *E-HICH Power Offset* IE is included in the *Additional E-DCH RL Specific Information To Add* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to
   "Individual" in the existing Additional E-DCH RL(s) and the RADIO LINK ADDITION REQUEST message
   includes the *DL Reference Power* IE in the *Multicell E-DCH RL Specific Information* IE in the *Additional E-DCH RL Specific Information To Add* IE, the DRNS shall activate the power balancing and use the *DL Reference Power* IE for the power balancing procedure in the new Additional RL(s), if activation of power balancing by the
   RADIO LINK ADDITION REQUEST message is supported, according to subclause 8.3.15. In this case, the
   DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD
   Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE in the RADIO LINK
   ADDITION RESPONSE message. If the DRNS 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
   which is calculated based on the following IEs in the *Additional E-DCH RL Specific Information To Add* IE (if
   received): *Primary CPICH Ec/No* IE or the *Enhanced Primary CPICH Ec/No* IE in the *Multicell E-DCH RL
   Specific Information* IE or to the power level which is calculated based on the power level which is calculated based on the Primary
   CPICH power used by the existing Additional RLs.]
- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message to a value that uniquely identifies the RL as a RL Set within the UE Context. The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]
- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]
- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set the same value for the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE in the RADIO LINK ADDITION RESPONSE message.]

[FDD – For every additional E-DCH RL indicated in the Additional E-DCH RL Specific Information To Add IE the DRNS 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 DRNS may include the corresponding E-RGCH Signature Sequence IE in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RL Add IE in the RADIO LINK ADDITION RESPONSE message and if DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE, then it shall insert the E-RGCH and E-HICH Channelisation Code IE to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]

[FDD – If in the Additional E-DCH RL Specific Information To Add IE the Primary CPICH Ec/No IE or the Primary CPICH Ec/No IE and the Enhanced Primary CPICH Ec/No IE in the Multicell E-DCH RL Specific Information IE measured by the UE are included for an RL in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power for this additional RL. If the Primary CPICH Ec/No IE is not present, the DRNS shall set the Initial DL TX Power based on the power relative to the Primary CPICH power used by the existing RLs.]

#### [TDD – HS-DSCH Setup:]

[TDD – If the HS-DSCH Information IE is present in the RADIO LINK ADDITION REQUEST message, then:]

- [TDD The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.]
- [TDD The DRNC 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 DRNS shall use the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).]
- [TDD The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [TDD The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK ADDITION RESPONSE message.]
- [TDD The DRNC 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 DRNC may use the transport layer address and the binding identifier received from the SRNC 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC 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 DRNS 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 DRNS 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 DRNC 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 DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].]

- [TDD The DRNC 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 DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. 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 DRNC 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 I 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 DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] in the HS-DSCH TDD Information Response 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 DRNS shall activate the MIMO mode for the HS-DSCH Radio Link. The DRNS 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 ADDITION RESPONSE message.]

- [1.28 Mcps TDD – If the *UE TSO Capability LCR* IE is included in the *HS-DSCH TDD Information* IE, then the DRNC may include the *TSO HS-PDSCH Indication LCR* IE in the RADIO LINK ADDITION RESPONSE message if HS-PDSCH resources could be allocated on TS0 for the UE.]

#### [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 DRNC shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [TDD The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall 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:]

[3.84Mcps TDD, 1.28Mcps TDD and 7.68Mcps 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 DRNS 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 DRNS 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 DRNC may use the transport layer address and the binding identifier received from the SRNC 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 DRNS 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 DRNS shall assume non-scheduled grants are configured for that E-DCH MAC-d flow.]
- [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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [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 DRNS 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 DRNS 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* 7.68*Mcps* IE in the *E-DCH TDD Information* 7.68*Mcps* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [3.84Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [7.68Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information* 7.68Mcps IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information LCR* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [TDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the [3.84Mcps TDD E-DCH TDD Information IE][1.28Mcps TDD – E-DCH TDD Information LCR IE] in the E-DCH MAC-d Flows Information TDD IE, then the DRNS 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 DRNS shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]

- [3.84Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information TDD* IE in the *E-DCH Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [3.84Mcps TDD The DRNS 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.]
- [1.28Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information LCR TDD* IE in the *E-DCH Information Response* 1.28Mcps IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD The DRNS shall allocate an E-RNTI identifier and include the E-RNTI identifier, the E-AGCH(s) and E-HICH(s) assigned in the *E-DCH Information Response 1.28Mcps* IE in the RADIO LINK ADDITION RESPONSE message.]
- [7.684Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information* 7.68Mcps *TDD* IE in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK ADDITION RESPONSE message.]
- [7.68Mcps TDD The DRNS shall allocate an E-RNTI identifier and include the E-RNTI identifier and the E-AGCH(s) assigned in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *Multi-Carrier E-DCH Physical Layer Category LCR* IE in the *E-DCH TDD Information LCR* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for multi-carrier E-DCH scheduling.]
- [1.28Mcps TDD If the UE TSO Capability LCR IE in the UE Capabilities Information IE in the HS-DSCH Information IE is not present and if the RADIO LINK ADDITION REQUEST message includes the UE TSO Capability LCR IE in the E-DCH TDD Information LCR IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

# [3.84Mcps TDD – Intra-Node B Serving E-DCH Radio Link Change:]

[3.84Mcps TDD – If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Serving RL* IE, this indicates the new Serving E-DCH Radio Link:]

- [3.84Mcps TDD – The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* IE in the *E-DCH Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

#### [1.28Mcps TDD – Intra-Node B Serving E-DCH Radio Link Change:]

[1.28Mcps TDD – If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Serving RL* IE, this indicates the new Serving E-DCH Radio Link:]

 [1.28Mcps TDD – The DRNS shall allocate E-AGCH parameters and E-HICH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* IE and the *E-HICH Specific Information Response* IE in the *E-DCH Information Response* 1.28Mcps IE in the RADIO LINK ADDITION RESPONSE message.]

#### [7.68Mcps TDD – Intra-Node B Serving E-DCH Radio Link Change:]

[7.68Mcps TDD – If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Serving RL* IE, this indicates the new Serving E-DCH Radio Link:]

- [7.68Mcps TDD – The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* 7.68Mcps TDD IE in the *E-DCH Information Response* 7.68Mcps 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 DRNS shall take account into these parameters to decide the DRX operation related parameters and configure the concerned UE Context for DRX operation according to TS 25.224 [22] 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 DRNS may use this value to determine the Inactivity Threshold for UE DRX Cycle according to TS 25.224 [22].]

[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 DRNS 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 TS 25.224 [22].]
- [1.28 Mcps TDD The DRNS 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 DRNS shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK ADDITON RESPONSE message.]
- [1.28 Mcps TDD The DRNS shall include the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28 Mcps TDD The DRNS shall include the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK ADDITION 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 LCR IE, then the DRNS shall apply this information for HS-DSCH Semi-Persistent scheduling operation.]

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

- [1.28 Mcps TDD The DRNS 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 TS 25.224 [22].]
- [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 DRNS shall include *Allcoated E-DCH Semi-persistent resource* IE in the RADIO LINK ADDITON RESPONSE message.]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent scheduling Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the DRNS shall apply this information for E-DCH Semi-Persistent scheduling operation.]

# [1.28 Mcps TDD –Multi-Carrier E-DCH:]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information* IE is present in the RADIO LINK ADDITION REQUEST message, then the *Multi-Carrier E-DCH Information* IE defines the new configuration and then:]

- [1.28Mcps TDD The DRNS shall setup the requested E-DCH resource on the uplink frequecies indicated by the the *Multi-Carrier E-DCH Information LCR* IE.]
- [1.28Mcps TDD The DRNS shall use the corresponding *PRXdes\_base* IE for power control on each uplink frequency according to TS 25.331 [16].]
- [1.28Mcps TDD If the *SNPL Carrier Group Indicator* IE is present in the *Multi-Carrier E-DCH Information LCR* IE, the DRNS shall use the information to determine which SNPL Carrier Group each frequency indicated by the *UARFCN* IE belongs to.]
- [1.28Mcps TDD If the *Multi-Carrier E-DCH Transport Bearer Mode LCR* IE is set to "Separate Iur transport bearer mode", the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]

- [1.28Mcps TDD If the *Multi-Carrier E-DCH Transport Bearer Mode LCR* IE is set to "E-DCH UL flow multiplexing mode", the DRNS shall use this mode in the new configuration and multiplex MAC-d flow received on the different carriers on one Iur transport bearer.]
- [1.28Mcps TDD If the Separate Iur transport bearer mode is used in the new configuration, then the DRNS shall include the *Binding ID* IE and *Transport Layer Address* IE in the *Multi-Carrier E-DCH Information Response LCR* IE in the RADIO LINK ADDITION RESPONSE message for establishment of a transport bearer for every E-DCH MAC-d flow being established.]
- [1.28Mcps TDD If the E-DCH UL flow multiplexing mode is used in the new configuration, then the DRNS shall include the *Binding ID* IE and *Transport Layer Address* IE in the *E-DCH TDD Information Response* 1.28Mcps IE in the RADIO LINK ADDITION RESPONSE message for establishment of a transport bearer for every E-DCH MAC-d flow being established.]

### [1.28 Mcps TDD - MU-MIMO Handling:]

[1.28Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the MU-MIMO Indicator IE, then:]

- [1.28 Mcps TDD the DRNS may use the MU-MIMO for the radio link according to the MU-MIMO Usage Indicator IE and shall include the MU-MIMO Information IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD If the *Standalone Midamble Channel Indicator* IE is set to "Used", then the DRNS shall
  include Standalone Midamble Channel information in the RADIO LINK ADDITION RESPONSE message.
   Else, the DRNS shall not include Standalone Midamble Channel information in the RADIO LINK ADDITION
  RESPONSE message.

#### **Response message:**

If all requested RLs are successfully added, the DRNC shall respond with a RADIO LINK ADDITION RESPONSE message.

After sending the RADIO LINK ADDITION RESPONSE message the DRNS 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 DRNS shall:

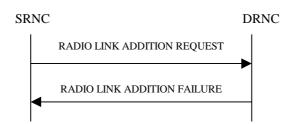
- [FDD -start transmission on the DL DPDCH(s) of the new RL as specified in TS 25.427 [4].]
- [TDD start transmission on the new RL immediately as specified in TS 25.427 [4].]

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

- if the Delayed Activation IE indicates "Separate Indication":
  - not start any DL transmission for the concerning 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 TS 25.427 [4], 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 TS 25.427 [4].]

[1.28 Mcps TDD – if the DRNS assigns one or more PLCCH sequence numbers to the radio link, then the PLCCH assignment(s) shall be sent to the SRNC in the RADIO LINK ADDITION RESPONSE message.]

# 8.3.2.3 Unsuccessful Operation



# Figure 8: Radio Link Addition procedure: Unsuccessful Operation

If the establishment of at least one RL is unsuccessful, the DRNC shall respond with a RADIO LINK ADDITION FAILURE message. DRNC shall include in the RADIO LINK ADDITION FAILURE message a general *Cause* IE or a *Cause* IE for each failed radio link. The *Cause* IE indicates the reason for failure.

[FDD – If some RL(s) were established successfully, the DRNC 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 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 DRNS 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 unsuccessful, the DRNS shall indicate this in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the *Additional HS Cell 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 DRNS shall indicate this in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION FAILURE message.]

[FDD – If the *MIMO Activation Indicator* IE is included and the *Power Offset For S-CPICH for MIMO Request Indicator* IE is not included in the *HS-DSCH FDD Information* IE in the *HS-DSCH Serving Cell Change Information* IE in the RADIO LINK ADDITION REQUEST message or the power offset for S-CPICH for MIMO Request indicator has not been configured in the UE Context but MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the setup of the serving HS-DSCH Radio Link shall be reported as failed and the DRNC shall include in the RADIO LINK ADDITION FAILURE message the *Cause* IE.]

[FDD – If the *MIMO with four transmit antennas Activation Indicator* IE or the *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included and the *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is not included in the *HS-DSCH FDD Information* IE in the *HS-DSCH Serving Cell Change Information* IE in the RADIO LINK ADDITION REQUEST message or the power offset for S-CPICH for MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the setup of the serving HS-DSCH Radio Link shall be reported as failed and the DRNC shall include in the RADIO LINK ADDITION FAILURE message the *Cause* IE.]

[FDD – If the requested additional serving E-DCH Radio Link Change was successful, or if the addition of the requested additional serving E-DCH Radio Link was successful or existed already but the additional serving E-DCH Radio Link change was unsuccessful, the DRNS shall indicate this in the *Additional E-DCH Secondary Serving Cell Change Information Response* IE in the *Additional E-DCH Cell Change Information Response* IE in the RADIO LINK ADDITION FAILURE message.]

Typical cause values are:

#### **Radio Network Layer Causes:**

DL Radio Resources not Available;

UL Radio Resources not Available; Combining Resources not Available; Combining not Supported Cell not Available; [FDD – Requested Tx Diversity Mode not Supported;] Power Level not Supported; CM not Supported; Reconfiguration CFN not Elapsed; Number of DL Codes not Supported; Number of UL codes not Supported; [FDD – DPC mode change not Supported;] Cell reserved for operator use; Delayed Activation not supported; [FDD – F-DPCH not supported;] E-DCH not supported; [FDD – MIMO not supported;] [FDD – E-DCH TTI2ms 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 – F-DPCH Slot Format operation not supported;] [FDD – E-DPCCH Power Boosting not supported;] [FDD - SixtyfourQAM DL and MIMO Combined not available;] [FDD – Multi Cell operation not available;] [FDD – Multi Cell operation not supported;] [1.28Mcps TDD – MIMO not supported;] [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 - Single Stream MIMO not available;] [FDD – Multi Cell operation with MIMO not available;] [FDD – Multi Cell operation with MIMO not supported;] [FDD – Multi Cell E-DCH Operation not supported;] [FDD – Multi Cell E-DCH Operation not available;] [FDD - Multi Cell operation with Single Stream MIMO not available;] [FDD – Multi Cell operation with Single Stream MIMO not supported;] [FDD – Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available;] [FDD – Cell Specific Tx Diversity Handling For Multi Cell Operation Not Supported;] [FDD – Frequency Specific Compressed Mode Not Available;] [FDD – Uplink Closed Loop Transmit Diversity Operation Not Available;] [FDD – Uplink Closed Loop Transmit Diversity Operation Not Supported;] [FDD – MIMO with four transmit antennas not supported;] [FDD – MIMO with four transmit antennas not available;] [FDD – Dual Stream MIMO with four transmit antennas not supported;] [FDD – Dual Stream MIMO with four transmit antennas not available;] [FDD – Multiflow Operation Not Available;] [FDD – Multiflow Operation Not Supported;] [FDD – SixtyfourQAM UL not Available;] [FDD - SixtyfourQAM UL not Supported;] [FDD - UL MIMO Operation Not Available;] [FDD – UL MIMO Operation Not Supported;] [FDD – UL MIMO and SixteenQAM Operation Not Available;] [FDD - UL MIMO and SixteenQAM Operation Not Supported;] [FDD – UL MIMO and SixtyfourQAM Operation Not Available;] [FDD – UL MIMO and SixtyfourQAM Operation Not Supported.]

#### **Transport Layer Causes:**

Transport Resource Unavailable.

#### **Miscellaneous Causes:**

Control Processing Overload;

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HW Failure; Not enough User Plane Processing Resources.

# 8.3.2.4 Abnormal Conditions

If the RADIO LINK ADDITION REQUEST message includes a *C-ID* IE corresponding to a cell reserved for operator use and the Permanent NAS UE Identity is not available in the DRNC for the considered UE Context, the DRNC shall reject the procedure for this particular Radio Link and send the RADIO LINK ADDITION FAILURE message.

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Transmission Gap Pattern Sequence Status* IEs in the *Active Pattern Sequence Information* IE and it does not address exactly all ongoing compressed mode patterns and frequency specific compressed mode is not supported, the DRNS shall reject the Radio Link Addition procedure and shall respond with a RADIO LINK ADDITION FAILURE message with the *Cause* IE value "Invalid CM settings".]

[FDD – If the RADIO LINK ADDITION REQUEST message is used to establish a new RL without compressed mode when compressed mode is active for the existing RL(s) (as specified in subclause 8.3.2.2), and if at least one of the new RLs is to be established in a cell that has the same UARFCN (both UL and DL) as at least one cell with an already existing RL and frequency specific compressed mode is not supported,, the DRNS shall reject the Radio Link Addition procedure 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 UE 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 DRNC shall reject the Radio Link Addition procedure 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 UE Context set to "Common" in the existing RL(s), the DRNC shall reject the Radio Link Addition procedure and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Enhanced Primary CPICH Ec/No* IE, but not the *Primary CPICH Ec/No* IE, then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

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 [FDD – or for an E-DCH MAC-d flow in *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 existing E-DCH RL which transport bearer is not established in the DRNS], the DRNC 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 nor *RL Specific E-DCH Information* IE in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "May", the DRNC 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 DRNC 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 DRNC 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 for an HS-DSCH MAC-d Flow in the *HS-DSCH MAC-d Flows Information* IE, the DRNC shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.

If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport bearer intended to be established, the DRNC shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.

[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 UE Context is not configured for HS-DSCH, then the DRNS 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 the *HS-DSCH Serving Cell Change Information* IE, then the DRNS 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 UE Context is not configured for E-DCH, then the DRNS 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 DRNS 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 UE Context is not configured for E-DCH, then the DRNC 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 DRNC 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 DRNC 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 DRNS 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 DRNS but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not in the same cell then the DRNC 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 DRNC 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 DRNC 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 DRNC 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 DRNC 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 DRNC 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 DRNC 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", the *Additional HS Cell Information RL Addition* IE, the *MIMO with four transmit antennas Activation Indicator* IE, the *Dual Stream MIMO with four transmit antennas Activation Indicator* IE, the *Dual Stream MIMO with four transmit antennas Activation Indicator* IE, the *Dual Stream MIMO with four transmit antennas Activation Indicator* IE, but does not contain the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size", then the DRNC 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 in the RL Specific E-DCH Information for the new Serving E-DCH RL or there is at least one E-DCH MAC-d flow which transport bearer was not configured in the existing E-DCH RL to be combined with the Serving E-DCH RL, the DRNC 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 or an E-DCH MAC-d Flow for a specific RL and the specific RL is combined with the existing RL which the transport bearer is established for the DCH or the E-DCH MAC-d Flow in DRNS, the DRNC 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 indicating a secondary serving cell that is not in the same Node B as the new serving HS-DSCH cell, then the DRNC 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 DRNS Communication Context and the *HS-DSCH Information* IE is not present, then the DRNS shall reject the procedure using the RADIO LINK SETUP 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 DRNC 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 DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

[FDD – If the RADIO LINK ADDITION REQUEST message contains more than one of a *MIMO Activation Indicator* IE, a *MIMO with four transmit antennas Activation Indicator* IE, a *Dual Stream MIMO with four transmit antennas* Activation Indicator IE, a Dual Stream MIMO with four transmit antennas Activation Indicator IE in the HS-DSCH FDD Information IE in the HS-DSCH Serving Cell Change Information IE or in the HS-DSCH FDD Secondary Serving Information IE in the Additional HS Cell Information RL Addition IE, then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Additional E-DCH Cell Information RL Setup Req* IE and if the *E-DPCH Information* IE is not present or the E-DPCH Information was not configured in the UE Context, then the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Additional E-DCH Cell Information RL Add Req* 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 DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Additional E-DCH Cell Information RL Add Req* IE and the *C-ID* IE is not included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, but the Radio Link indicated by

*the E-DCH Additional RL ID* IE is not configured in the current UE context as a Secondary Serving HS-DSCH radio link without any configured Additional E-DCH, the DRNS 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 UE Context, then the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the secondary serving HS-DSCH is not configured in the UE 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 DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *Additional HS Cell Information RL Addition* IE and the new configuration contains more than one secondary serving HS-DSCH RL and all secondary serving HS-DSCH RLs in the new configuration will not be assigned consecutive ordinal numbers starting with the value "1", which are previously assigned to the RL or received in the *Ordinal Number Of Frequency* IE in the *HS-DSCH FDD Secondary Serving Information* IE, the DRNS 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 the new configuration contains more than one secondary serving HS-DSCH RL, the new configuration also contains an Additional E-DCH Serving Radio Link and the secondary serving HS-DSCH Radio link, which is configured in the same cell as the Additional E-DCH Serving Radio Link does not have Ordinal Number Of Frequency value "1", the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *Affected HS-DSCH serving cell List* IE in the *Active Pattern Sequence Information* IE, and the Transmission Gap Pattern Sequence for affected HS-DSCH Serving Cells is activated on the HS-DSCH Primary Serving Cell but not for all the other serving cells, the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message with the cause value "Invalid CM settings".]

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *UL MIMO Information* IE but does not contain the *UL CLTD Information* IE, then the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains more than one of a *MIMO Activation Indicator* IE, a *MIMO with four transmit antennas Activation Indicator* IE, a *Dual Stream MIMO with four transmit antennas Activation Indicator* IE in *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

# 8.3.3 Radio Link Deletion

# 8.3.3.1 General

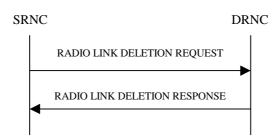
The Radio Link Deletion procedure is used to release the resources in a DRNS for one or more established radio links towards a UE.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Radio Link Deletion procedure may be initiated by the SRNC at any time after establishing a Radio Link.

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# 8.3.3.2 Successful Operation



# Figure 9: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the SRNC to the DRNC.

Upon receipt of this message, the DRNS shall delete the radio link(s) identified by the *RL ID* IE(s) in the message, shall release all associated resources and shall respond to the SRNC with a RADIO LINK DELETION RESPONSE message.

If the radio link(s) to be deleted represent the last radio link(s) for the UE in the DRNS and if the UE is not using any common resources in the DRNS, then the DRNC shall release the UE Context.

[FDD – After deletion of the RL(s), the UL out-of-sync algorithm defined in TS 25.214 [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. The UL in-sync algorithm defined in TS 25.214 [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 DRNS, the DRNC 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 DRNC shall delete the secondary serving HS-DSCH Radio Link.]

# 8.3.3.3 Unsuccessful Operation

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# 8.3.3.4 Abnormal Conditions

If the RL indicated by the *RL ID* IE does not exist, the DRNC shall respond with the RADIO LINK DELETION RESPONSE message.

# 8.3.4 Synchronised Radio Link Reconfiguration Preparation

# 8.3.4.1 General

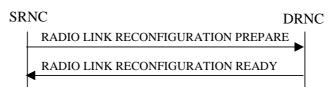
The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one UE-UTRAN connection within a DRNS.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

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# 8.3.4.2 Successful Operation



# Figure 10: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the DRNC.

Upon receipt, the DRNS 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.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allowed Queuing Time* IE the DRNS may queue the request the time corresponding to the value of the *Allowed Queuing Time* IE before starting to execute the request.

The DRNS shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

If the *UE Aggregate Maximum Bit Rate* IE is contained in the RADIO LINK RECONFIGURATION PREPARE message, the DRNS shall, if supported, store the received UE Aggregate Maximum Bit Rate parameters to control the aggregate data rate of non GBR traffic for this UE.

### **DCH Modification:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs To Modify* IEs, the DRNS shall treat them each as follows:

- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs then the DRNS shall treat the DCHs in the *DCHs To Modify* IE as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS 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 to be modified, the DRNS 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 to be modified, the DRNS shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Frame Handling Priority* IE for a DCH to be modified, the DRNS 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 DRNS once the new configuration has been activated.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Traffic Class* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this DCH indicates the value "RRC".
- [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 DRNS 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 DRNS 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 contains a *DCH Specific Info* IE which includes the *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS 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 DRNS 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 contains a *DCH Specific Info* IE which includes the *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- [TDD If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the UL, the DRNS shall map the DCH onto the referenced UL CCTrCH in the new configuration.]
- [TDD If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the DL, the DRNS shall map the DCH onto the referenced DL CCTrCH in the new configuration.]
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.

#### **DCH Addition:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs To Add* IEs, the DRNS shall treat them each as follows:

- The DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.
- If the *DCH Information* IE includes a *DCHs To Add* IE with multiple *DCH Specific Info* IEs, the DRNS shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The DRNS 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 DRNS 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 DRNS 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 each DCH which do not belong to a set of co-ordinated DCHs and which includes a *QE-Selector* IE set to "selected", the DRNS shall use the Transport channel BER from that DCH for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. If the *QE-Selector* IE is set to "non-selected", the DRNS shall use the Physical channel BER for the QE in the UL data frames, TS 25.427 [4].]
- For a set of co-ordinated DCHs, the DRNS shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" for the QE in the UL data frames, TS 25.427 [4]. [FDD If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. If all DCHs have the *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. [TDD If no Transport channel BER for the QE, TS 25.427 [4].]
- The DRNS 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 DRNS 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 DRNS may use this information to determine the transport bearer characteristics to apply for the uplink for the related DCH or set of co-ordinated DCHs.
- The DRNS should store the *Traffic Class* IE received for a DCH to be added in the new configuration. The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE indicates the value "RRC".
- The DRNS 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 DRNS 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 DRNS 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.
- [3.84Mcps TDD The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if at least one DSCH or USCH exists in the new configuration.]
- [1.28Mcps TDD The DRNC shall include the *Secondary CCPCH Info TDD LCR* IE in the RADIO LINK RECONFIGURATION READY message if at least one DSCH or USCH exists in the new configuration.]
- [7.68Mcps TDD The DRNC shall include the *Secondary CCPCH Info TDD* 7.68Mcps IE in the RADIO LINK RECONFIGURATION READY message if at least one DSCH or USCH exists in the new configuration.]
- If the *DCHs To Add* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCHs To Add* IE does not include the *Guaranteed UL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below

the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCHs To Add* IE does not include the *Guaranteed DL Rate* IE, the DRNS shall not limit the user rate of the downlink of the DCH.

- [TDD The DRNS shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD The DRNS 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 *DCH To Delete*, the DRNS 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 DRNS 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, the DRNS shall apply the parameters to the new configuration as follows:]

- [FDD If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the DRNS 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 DRNS shall apply the new Min UL Channelisation Code Length in the new configuration. The DRNS 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 *TFCS* IE, the DRNS shall use the *TFCS* IE for the UL when reserving resources for the uplink of the new configuration. The DRNS 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 DRNS shall apply the new Uplink DPCCH *Slot Format* to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the DRNS 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 DRNS shall apply the value in the uplink of the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the DRNS 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 a *DL DPCH Information* IE and the concerned UE Context is configured to use F-DPCH in the downlink in the old configuration, the DRNS shall configure the concerned UE Context to use DPCH in the downlink in the new configuration. In this case, if at least one Transmission Gap Pattern Sequence is configured with an SF/2 downlink compressed mode method in the new configuration, the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK RECONFIGURATION READY message indicating for each Channelisation Code whether the alternative scrambling code shall be used or not.]

- [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *DL DPCH Power Information* IE, the DRNS 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 DRNS shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the DRNS shall deactivate the inner loop DL power control for all RLs according to TS 25.214 [10]. Furthermore, the DRNC shall include the *DL Code Information* IE in the RADIO LINK RECONFIGURATION READY.] [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE, the DRNS shall apply the parameters to the new configuration as follows:]

- [FDD If the *DL DPCH Information* IE includes the *Number of DL Channelisation Codes* IE, the DRNS shall allocate given number of Downlink Channelisation Codes per Radio Link and apply the new Downlink Channelisation Code(s) to the new configuration. Each Downlink Channelisation Code allocated for the new configuration shall be included in the RADIO LINK RECONFIGURATION READY message within the *DL Code Information* IE as a *FDD DL Channelisation Code Number* IE when sent to the SRNC. If some Transmission Gap Pattern sequences using "SF/2" method are already initialised in the DRNS, DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK RECONFIGURATION READY message in case the DRNS selects to change the Scrambling code change method for one or more DL Channelisation Code.]
- [FDD When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to TS 25.211 [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 *p*th to "*PhCH number p*".]
- [FDD If the *DL DPCH Information* IE includes the *TFCS* IE, the DRNS shall use the *TFCS* IE for the DL when reserving resources for the downlink of the new configuration. The DRNS shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *DL DPCH Slot Format* IE, the DRNS shall apply the new slot format used in DPCH in DL.]
- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the DRNS shall apply the new signalling mode of the TFCI.]
- [FDD If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the DRNS shall apply the new parameter to define whether fixed or flexible positions of transport channels shall be used in the physical channel.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the DRNS shall, if supported, use Limited Power Increase according to TS 25.214 [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 DRNS 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, then:]

- [FDD The DRNS shall configure the concerned UE Context to use F-DPCH in the downlink in the new configuration.]
- [FDD If the *F-DPCH Information* IE includes the *F-DPCH Slot Format Support Request* IE, then the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211 [8] and include the *F-DPCH Slot Format* IE in the RADIO LINK RECONFIGURATION READY message. If the *F-DPCH Information* IE includes the *F-DPCH Slot Format* IE, the DRNC may use the *F-DPCH Slot Format* IE to determine the F-DPCH slot format.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE, the DRNS 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 DRNS until the next Compressed Mode Configuration is configured in the DRNS or until the last Radio Link is deleted.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE and the *Downlink Compressed Mode Method* IE in one or more Transmission Gap Pattern Sequence within the *Transmission Gap Pattern Sequence Information* IE is set to "SF/2" and the UE Context is configured to use DPCH in the downlink in the new configuration, the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK RECONFIGURATION READY message indicating for each Channelisation Code whether the alternative scrambling code shall be used or not.] [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DPCH Information* IE, the DRNS 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 DRNS 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 DRNS 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 DRNS shall use the *E-TFCS Information* IE for the E-DCH when reserving resources for the uplink of the new configuration. The DRNS 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 Validity Indicator* IE the DRNS shall ignore the value in *E-DCH Minimum Set E-TFCI validity Indicator* IE is absent DRNS 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 DRNS shall use the value to determine the applicable E-DPDCH power formula defined in TS 25.214 [10]. If the *E-DPDCH Power Interpolation* IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in TS 25.214 [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 DRNS shall use the information according to TS 25.214 [10]. If the *E-TFCI Boost Information* IE is not present, the DRNS shall use the value "127" in the algorithm defined in TS 25.214 [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 DRNS 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 DRNS 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 DRNS 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 DRNS shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-DCH HARQ Info* IE, the DRNS 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 DRNS 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 DRNS shall use the value to determine the applicable minimum gain factor (β<sub>ed,k,reduced,min</sub>) defined in TS 25.214 [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the UE Context, the DRNS may use the default value defined in TS 25.331 [16]. ]

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

- [FDD The DRNS shall configure the concerned UE Context for Continuous Packet Connectivity DTX operation according to TS 25.214 [10].]
- [FDD If *DRX Information* IE is included in the *Continuous Packet Connectivity DTX-DRX Information* IE, then the DRNS shall configure the concerned UE Context for Continuous Packet Connectivity DRX operation according to TS 25.214 [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 DRNS 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 DRNS shall use this value to determine the beginning of uplink transmission in the new configuration according to TS 25.214 [10].]
- [FDD If the *DTX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the DRNS 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 DRNS 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 DRNS 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 TS 25.214 [10].]
- [FDD The DRNS 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 DRNC 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 DRNS shall deactive the Continuous Packet Connectivity HS-SCCH less operation for the HS-DSCH Radio Link.]

# [FDD - UL CLTD Setup:]

[FDD - If the *UL CLTD Information Reconf* IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the choice of *Setup, Configuration Change or Removal of UL CLTD* is "Setup", then: the DRNS shall setup the requested UL CLTD resources for the concerned UE Context in the cell to determine the precoding weights according the new configuration defined in the *UL CLTD Information* IE and then:]

- [FDD - If there is neither serving E-DCH RL nor the HS-DSCH RL configuration in the UE Context, the *C-ID* IE shall be included in the *UL CLTD Information* IE, and the DRNS shall configure this cell to determine the precoding weights for the concerned UE Context.]

[FDD - If the *UL CLTD Activation Information* IE is included in the *UL CLTD Information* IE, then the DRNS shall use this value to configure the state of UL CLTD for the concerned UE Context.]

# [FDD - UL CLTD Modification:]

[FDD - If the UL CLTD Information Reconf IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the choice of Setup, Configuration Change or Removal of UL CLTD is "Configuration Change", then: the UL CLTD Information To Modify IE defines the new configuration and then:]

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *C-ID* IE in the *UL CLTD Information To Modify* IE, then the DRNS shall configure this cell to determine the precoding weights for the concerned UE Context. Otherwise the DRNS shall configure the serving E-DCH cell or the HS\_DSCH serving cell to determine the precoding weights as specified in TS 25.319[38]. The UL CLTD configuration is only valid for the cell to determine the precoding weights.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *S-DPCCH Power Offset information* IE in the *UL CLTD Information To Modify* IE, then the DRNS shall use this value to determine the S-DPCCH power.]

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- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL CLTD State Activation Information* IE in the *UL CLTD Information To Modify* IE, then the DRNS shall use this value to update the local state of UL CLTD for the concerned UE Context. If the *UL CLTD Activation Information* IE is set to "Deactivated", the DRNS should release the F-TPICH resource configured for the concerned UE Context.]

## [FDD - UL CLTD Removal:]

[FDD - If the *UL CLTD Information Reconf* IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the choice of *Setup, Configuration Change or Removal of UL CLTD* is "Removal", then the configured UL CLTD for the concerned UE Context shall be removed.]

## [FDD – UL MIMO Setup:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL MIMO Information* IE in *E-DCH FDD Information*, or *UL MIMO Reconfiguration* IE and the choice of *Setup* or *Change* or *Stop* is "Setup", then the DRNS shall setup the requested UL MIMO operation.]

### [FDD – UL MIMO Modification:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes *UL MIMO Reconfiguration* IE and the choice of *Setup* or *Change* or *Stop* is "Change", then the DRNS shall apply the new configuration.]

### [FDD – UL MIMO Removal:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL MIMO Reconfiguration* IE and the choice of *Setup* or *Change* or *Stop* is "Stop", then the DRNS shall terminate the UL MIMO operation.]

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS shall take account into these parameters to decide the DRX operation related parameters and configure the concerned UE Context for DRX operation according to TS 25.224 [22] 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 *Inactivity Threshold for UE DRX Cycle Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS may use this value to determine the Inactivity Threshold for UE DRX Cycle according to TS 25.224 [22].]

[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 DRNS 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 DRNS shall use this value to determine the beginning of uplink transmission in the new configuration according to TS 25.224 [22].]
- [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 DRNS shall use this information to modify the indicated DRX Information in the new configuration.]

[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 DRNS 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 TS 25.224 [22].]
- [1.28 Mcps TDD The DRNS 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 DRNS 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 DRNS 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 TS 25.224 [22].]
- [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 DRNS shall include *Allocated 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 DRNS 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 TS 25.224 [22].]
- [1.28 Mcps TDD The DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 TS 25.224 [22].
- [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 DRNS shall apply this information for E-DCH Semi-Persistent scheduling operation.]
- [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 DRNS shall include *Allocated 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 DRNS 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 DRNS shall deactivate the E-DCH Semi-Persistent scheduling operation for the E-DCH Radio Link.]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *MU-MIMO Indicator* IE, then:]

- [1.28 Mcps TDD The DRNS may use the MU-MIMO for the radio link according to the *MU-MIMO Usage Indicator* IE and shall include the *MU-MIMO Information* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28 Mcps TDD If the *Standalone Midamble Channel Indicator* IE is set to "Used", then the DRNS shall include Standalone Midamble Channel information in the RADIO LINK RECONFIGURATION READY message. Else, the DRNS shall not include Standalone Midamble Channel information in the RADIO LINK RECONFIGURATION READY message.]

### [TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL CCTrCH To Modify IEs or DL CCTrCH To Modify IEs, then the DRNS shall treat them each as follows:]

- [TDD If any of the *UL CCTrCH To Modify* IEs or *DL CCTrCH To Modify* IEs includes any of the *TFCS* IE, *TFCI coding* IE, *Puncture limit* IE, or *TPC CCTrCH ID* IEs the DRNS shall apply these as the new values, otherwise the previous values specified for this CCTrCH are still applicable.]
- [TDD If any of the following listed DPCH information IEs are modified in the new prepared configuration, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the IEs indicating the new values: *Repetition Period* IE, *Repetition Length* IE, *TDD DPCH Offset* IE, [3.84Mcps TDD *UL Timeslot Information* IE,] [1.28Mcps TDD *UL Timeslot Information LCR* IE,] [7.68 Mcps TDD *DL Timeslot Information T.68 Mcps* IE,] [3.84Mcps TDD *DL Timeslot Information T.68 Mcps* IE,] [3.84Mcps TDD *DL Timeslot Information 7.68 Mcps* IE,] [7.68 Mcps TDD *DL Timeslot Information 7.68 Mcps* IE,] [7.68 Mcps TDD *DL Timeslot Information 7.68 Mcps* IE,] [1.28Mcps TDD *DL Timeslot Information 7.68 Mcps* IE,] [1.28Mcps TDD *Midamble Shift LCR* IE,] [7.68 Mcps TDD *Midamble Shift And Burst Type* IE,] [1.28Mcps TDD *Midamble Shift LCR* IE,] [7.68 Mcps TDD *Midamble Shift And Burst Type* 7.68 *Mcps* IE,] *TFCI Presence* IE, [3.84Mcps TDD *TDD Channelisation Code 7.68 Mcps* IE,] [1.28Mcps TDD *and/or TDD Channelisation Code LCR* IE,] [7.68 Mcps TDD *TDD Channelisation Code 7.68 Mcps* IE,] [1.28Mcps TDD *TDD UL DPCH Time Slot Format LCR* IE or *TDD DL DPCH Time Slot Format LCR* IE].]
- [1.28Mcps TDD If the *UL CCTrCH To Modify* IE includes the *UL SIR Target* IE, the DRNS shall use the value for the UL inner loop power control according to TS 25.221 [12] and TS 25.224 [22] in the new configuration.]
- [TDD If any of the *DL CCTrCH To Modify* IEs includes any *TPC CCTrCH ID* IEs, the DRNS shall apply these as the new values, otherwise the previous values specified for this CCTrCH are still applicable.]
- [1.28Mcps TDD If the *UL CCTrCH to Modify* IE includes the *TDD TPC Uplink Step Size* IE, the DRNS 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 Downlink Step Size* IE, the DRNS shall apply this value to the downlink TPC step size in the new configuration.]
- [1.28 Mcps TDD if the DRNS modifies, deletes or grants a new PLCCH assignment(s) to the UL CCTrCH, then the resulting PLCCH assignment(s) shall be sent to the SRNC in the RADIO LINK RECONFIGURATION READY message.]

### [TDD – UL/DL CCTrCH Addition]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH To Add* IEs or *DL CCTrCH To Add* IEs, the DRNS shall include this CCTrCH in the new configuration.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the DPCH information in [3.84Mcps TDD – *UL DPCH to be Added* IE/*DL DPCH to be Added* IEs] [1.28Mcps TDD – *UL DPCH to be Added LCR* IE/*DL DPCH to be Added* IEs] [3.84Mcps TDD – *UL DPCH to be Added LCR* IEs] [7.68 Mcps TDD – *UL DPCH to be Added 7.68 Mcps* IE/*DL DPCH to be Added 7.68 Mcps* IEs]. [3.84Mcps TDD – If no UL DPCH is active before a reconfiguration which adds an UL DPCH, and if a valid Rx Timing Deviation 3.84 Mcps Extended IE if the cell containing the radio link is configured for extended timing advance) in the RADIO LINK RECONFIGURATION READY message]. [7.68 Mcps TDD – If no UL DPCH is active before a reconfiguration measurement is known in DRNC, then the DRNC shall include the *Rx Timing Deviation* 3.84 Mcps Extended IE if a valid Rx Timing Deviation measurement is known in DRNC, then the DRNC shall include the *Rx Timing Deviation* 3.84 Mcps Extended IE if the cell containing the radio link is configured for extended timing advance) in the RADIO LINK RECONFIGURATION READY message]. [7.68 Mcps TDD – If no UL DPCH is active before a reconfiguration which adds an UL DPCH, and if a valid Rx Timing Deviation measurement is known in DRNC, then the DRNC shall include the *Rx Timing Deviation* 7.68 Mcps IE in the RADIO LINK RECONFIGURATION READY message].]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TDD TPC Downlink Step Size* IE within a *DL CCTrCH To Add* IE, the DRNS shall set the TPC step size of that CCTrCH to that value, otherwise the DRNS shall use the same value as the lowest numbered DL CCTrCH in the current configuration.]

[1.28Mcps TDD – The DRNS 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 to TS 25.221 [12] and TS 25.224 [22] in the new configuration.]

[TDD – If any of the *DL CCTrCH To Add* IEs includes any *TPC CCTrCH ID* IEs, the DRNS shall configure the identified UL CCTrCHs with TPC according to the parameters given in the message.]

[1.28Mcps TDD – If the *UL CCTrCH To Add* IE includes *TDD TPC Uplink Step Size* IE, the DRNS shall apply the uplink TPC step size in the new configuration.]

[1.28 Mcps TDD – if the DRNS grants a PLCCH assignment(s) to the UL CCTrCH, then the resulting PLCCH assignment(s) shall be sent to the SRNC in the RADIO LINK RECONFIGURATION READY message.]

# [TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH To Delete* IEs or *DL CCTrCH To Delete* IEs, the DRNS shall remove this CCTrCH in the new configuration, and the DRNC shall include in the RADIO LINK RECONFIGURATION READY message corresponding *UL DPCH to be Deleted* IEs and *DL DPCH to be Deleted* IEs.]

# **DL Power Control:**

[FDD – If the *RL Information* IE includes the *DL Reference Power* IEs and power balancing is active, DRNS 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 8.3.15, 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 DRNS, the DRNC 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* IEs, then the DRNS 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 – If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Add* IE, then the DRNS shall use the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE and *TrCH Source Statistics Descriptor* IE to define a set of DSCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.]

[TDD – The DRNC 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 added DSCH.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Add* IE, then the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related DSCHs.]

[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 DRNS may use the *TNL QoS* IE to determine the transport bearer characteristics to apply in the uplink for the related DSCH.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any DSCH To Modify IE, then the DRNS shall treat them each as follows:]

- [TDD – The DRNC shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for any new transport bearer to be established for each modified DSCH.]

- [TDD If the *DSCHs To Modify* IE includes the *CCTrCH ID* IE, then the DRNS shall map the DSCH onto the referenced DL CCTrCH.]
- [TDD If the *DSCHs To Modify* IE includes any of the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE or *TrCH Source Statistics Descriptor* IE, the DNRS shall use them to update the set of DSCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.]
- [TDD If the *DSCHs To Modify* IE includes any of the *Transport Format Set* IE or *BLER* IE, the DRNS shall apply the parameters to the new configuration.]
- [TDD If the *DSCHs To Modify* IE includes the *Traffic Class* IE, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related DSCHs.]
- [TDD If the *DSCHs To Modify* IE includes the *TNL QoS* IE and if ALCAP is not used, the DRNS may use the *TNL QoS* IE to determine the transport bearer characteristics to apply in the uplink for the related DSCH.]

[3.84 Mcps TDD – The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if a DSCH is added and at least one DCH exists in the new configuration. The DRNC shall also include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[1.28 Mcps TDD – The DRNC shall include the *Secondary CCPCH Info TDD LCR* IE in the RADIO LINK RECONFIGURATION READY message if a DSCH is added and at least one DCH exists in the new configuration. The DRNC shall also include the *Secondary CCPCH Info TDD LCR* IE in the RADIO LINK RECONFIGURATION READY message if the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[7.68 Mcps TDD – The DRNC shall include the *Secondary CCPCH Info* 7.68 Mcps TDD IE in the RADIO LINK RECONFIGURATION READY message if a DSCH is added and at least one DCH exists in the new configuration. The DRNC shall also include the *Secondary CCPCH Info* 7.68 Mcps TDD IE in the RADIO LINK RECONFIGURATION READY message if the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[TDD – The DRNC shall include the *DSCH Initial Window Size* IE in the RADIO LINK RECONFIGURATION READY message for each DSCH, if the DRNS allows the SRNC to start transmission of MAC-c/sh SDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32].]

#### [TDD USCH Addition/Modification/Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any USCH To Modify, USCH To Add or USCH To Delete IEs, then the DRNS 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 any USCH To Add IE, then, the DRNS shall use the Allocation/Retention Priority IE, Scheduling Priority Indicator IE and TrCH Source Statistics Descriptor IE to define a set of USCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any USCH To Add IE, then the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related USCHs.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any USCH To Add IE, if the TNL QoS IE is included and if ALCAP is not used, the DRNS may use the TNL QoS IE to determine the transport bearer characteristics to apply for the related USCHs.]

[TDD – The DRNC 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 added USCH.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any USCH To Modify IE, then the DRNS shall treat them each as follows:]

- [TDD If the USCH To Modify IE includes any of the Allocation/Retention Priority IE, Scheduling Priority Indicator IE or TrCH Source Statistics Descriptor IE, the DNRS shall use them to update the set of USCH Priority classes.]
- [TDD If the USCH To Modify IE includes any of the CCTrCH ID IE, Transport Format Set IE, BLER IE or RB Info IE, the DRNS shall apply the parameters to the new configuration.]
- [TDD If the USCHs To Modify IE includes the *Traffic Class* IE, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related USCHs.]
- [3.84Mcps TDD The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if a USCH is added and at least one DCH exists in the new configuration. The DRNC shall also include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]
- [1.28Mcps TDD The DRNC shall include the Secondary CCPCH Info TDD LCR IE in the RADIO LINK RECONFIGURATION READY message if a USCH is added and at least one DCH exists in the new configuration. The DRNC shall also include the Secondary CCPCH Info TDD LCR IE in the RADIO LINK RECONFIGURATION READY message if the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]
- [7.68Mcps TDD The DRNC shall include the Secondary CCPCH Info 7.68Mcps TDD IE in the RADIO LINK RECONFIGURATION READY message if a USCH is added and at least one DCH exists in the new configuration. The DRNC shall also include the Secondary CCPCH Info 7.68Mcps TDD IE in the RADIO LINK RECONFIGURATION READY message if the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]
- [TDD if the *TNL QoS* IE is included and if ALCAP is not used, the DRNS may use the *TNL QoS* IE to determine the transport bearer characteristics to apply for the related USCHs.]
- [TDD The DRNC shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for any new transport bearer to be established for each modified USCH.]

#### **RL Information:**

[FDD – If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the DRNS shall adjust the timing of the radio link accordingly in the new configuration. If the UE Context is configured to use F-DPCH in the downlink in the new configuration, the DRNC may include the *DL Code Information* IE in the RADIO LINK RECONFIGURATION READY message.]

[FDD - If the *RL Information* IE includes the *F-TPICH Information Reconf* IE and the choice of *Setup*, *Configuration Change or Removal of F-TPICH Information* is "Setup", then the DRNS shall use the information in *F-TPICH Information* IE to configure the F-TPICH of the RL according to TS 25.211 [7] and TS 25.214 [10], and shall include *F-TPICH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

[FDD - If the *RL Information* IE includes the *F*-TPICH Information Reconf IE and the choice of Setup, Configuration Change or Removal of F-TPICH Information is "Configuration Change", then: the *F*-TPICH Information To Modify IE defines the new configuration and then:]

- [FDD - If the *F*-*TPICH Information To Modify* IE includes the *F*-*TPICH Offset* IE, the DRNS shall use this information to configure the time offset of F-TPICH, and may include the *F*-*TPICH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

[FDD - If the *RL Information* IE includes the *F*-TPICH Information Reconf IE and the choice of Setup, Configuration Change or Removal of F-TPICH Information is "Removal", then the DRNS shall remove the configured F-TPICH for the RL.]

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

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

- The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.

- The DRNC 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, or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas 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 Activation Indicator IE is included in the HS-DSCH Information IE.]
- The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.
- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* 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 DRNS 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 DRNS 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 DRNS 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 DRNC 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 DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32] 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 DRNC 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 I 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 DRNS 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 DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall 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 DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68 Mcps TDD HS-SCCH Specific Information Response 7.68 Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD* 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 DRNS shall use the indicated HARQ Preamble Mode as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC 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 DRNC 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* IE, then the DRNS shall use the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).
- [FDD If the *MIMO Activation Indicator* IE, or the *MIMO with four transmit antennas Activation Indicator* IE, or *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then:]
  - [FDD The DRNS shall activate the MIMO mode, or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link.]
  - [FDD The DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas or Dual Stream MIMO with four transmit antennas and include the *MIMO Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD If the Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up on the cell with a non-zero power offset where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
  - [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up on the cell with a non-zero power offset where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]
- [1.28 Mcps TDD If the MIMO Activation Indicator IE is included in the HS-DSCH TDD Information IE, then:]
  - [1.28 Mcps TDD The DRNS shall activate the MIMO mode for the HS-DSCH Radio Link.]
  - [1.28 Mcps TDD The DRNS 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.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS 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 DRNS 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 DRNS shall include the HS-DSCH TB Size Table Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in TS 25.321
   [41] 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 DRNS 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 DRNS may use the supported HSDPA functions for this UE.]
- [FDD If the UE Support Indicator Extension IE is included in the HS-DSCH FDD Information IE with the bit UE DTXDRX related HS-SCCH orders uniform behavior indicator set to 0, then the DRNS shall, if supported, include the Support of dynamic DTXDRX related HS-SCCH order IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [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.]
- 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 DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *Priority Queue Information* IE in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the DRNS shall, if supported, consider the data of the related HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]
- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS shall activate the Single Stream MIMO for the HS-DSCH Radio Link.]
- [1.28 Mcps TDD If the UE TSO Capability LCR IE is included in the HS-DSCH TDD Information IE, then the DRNC may include the TSO HS-PDSCH Indication LCR IE in the RADIO LINK RECONFIGURATION READY message if HS-PDSCH resources could be allocated on TSO for the UE.]

# [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, and no secondary serving HS-DSCH Radio Link(s) has been configured in the DRNS or if the new configuration contains more than one secondary serving HS-DSCH Radio Link, then if the *Ordinal Number Of Frequency* IEs, in the *HS-DSCH FDD Secondary Serving Information* IE or in the *HS-DSCH FDD Secondary Serving Information To Modify* IE for each instance of the *Additional HS Cell Information RL Reconf Prep* IE, indicate that new secondary serving HS-DSCH Radio Link(s) shall be setup, then:]

- [FDD The DRNS 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 secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the HS-DSCH-RNTI IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [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 DRNS 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.]

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- [FDD The DRNC shall include the *Measurement Power Offset* 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 The DRNS shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and the DRNC shall 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 MIMO Activation Indicator IE, or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the MIMO mode, or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link and the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas or Dual Stream MIMO with four transmit antennas and include the MIMO 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 *Power Offset For S-CPICH for MIMO Request Indicator* IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up on the cell with a non-zero power offset where the Secondary Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up on the cell with a non-zero power offset where the Secondary Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Secondary Serving Information Response IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the Power Offset For S-CPICH for S-CPICH for S-CPICH for MIMO with four transmit antennas IE.]
- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* 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 DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS 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 DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondaery serving HS-DSCH, then the DRNC 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 TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD If the *Diversity Mode* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, the DRNS shall apply cell specific transmit diversity configuration and if the *Diversity Mode* IE is not set to "None" the DRNS 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 *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]

#### Intra-DRNS 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:

The DRNS 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 DRNC 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.]

- If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* IE.

The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.

If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION READY message.

[FDD – The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

[FDD – The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall 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 DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD – *HS-SCCH Specific Information Response LCR* IE] [7.68 Mcps TDD – *HS-SCCH Specific Information Response 7.68 Mcps* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

[TDD – The DRNC shall include the [3.84 Mcps TDD – *HS-PDSCH Timeslot Specific Information* IE] [1.28 Mcps TDD – *HS-PDSCH Timeslot Specific Information LCR* IE] [7.68 Mcps TDD – *HS-PDSCH Timeslot Specific Information 7.68 Mcps* IE] in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

[FDD – The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the [FDD HS-DSCH FDD Information Response IE] [TDD 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- [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 UE 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 DRNS 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 If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the DRNS shall
  include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Information Response* IE in the RADIO
  LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in TS 25.321
  [41] for HS-DSCH Transport Block Size signalling.]
- [FDD If the power offset for S-CPICH for MIMO Request indicator and MIMO activation indicator have been configured in the new configuration and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the power offset for S-CPICH for MIMO with four transmit antennas Request indicator and MIMO with four transmit antennas activation indicator or Dual Stream MIMO with four transmit antennas activation indicator have been configured in the new configuration and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]

#### [FDD – Intra-DRNS Secondary Serving HS-DSCH Radio Link Change:]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *C-ID* IE in the *Additional HS Cell Information RL Reconf Prep* IE, one or more secondary serving HS-DSCH Radio Link(s) has been configured in the DRNS and if the new configuration contains more than one secondary serving HS-DSCH Radio Link, then if the *Ordinal Number Of Frequency* IEs, in the *HS-DSCH FDD Secondary Serving Information* IE for each instance of the *Additional HS Cell Information RL Reconf Prep* IE, indicate that existing secondary serving HS-DSCH Radio Links shall be subject to intra-DRNS secondary serving HS-DSCH Radio Link change, then the *HS-PDSCH RL ID* IE indicates the new Serving HS-DSCH Radio Link:]

- [FDD The DRNS 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 DRNS shall remove the old secondary serving HS-PDSCH Radio Link if no E-DCH resources are allocated to the RL. Non cell specific secondary serving Radio Link and non cell specific secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the HS-DSCH-RNTI IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNC shall include the *Measurement Power Offset* 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 *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and the DRNC shall 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 The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* 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 UE 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 DRNS 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 Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH, the DRNS 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 TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD If the old and/or new configuration contains more than one Secondary Serving HS-DSCH Radio Link the *HS-DSCH FDD Secondary Serving Information* IE defines the new secondary serving HS-DSCH configuration in the DRNS to be used on the new secondary serving HS-DSCH Radio Link, and then:]
  - [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 DRNS 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 *MIMO Activation Indicator* IE or *MIMO with four transmit antennas Activation Indicator* IE, or *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS shall activate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link and the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas, or Dual Stream MIMO with four transmit antennas mode and include the *MIMO 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 RECONFIGURATION READY message.]
  - [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
  - [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS 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 DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
  - [FDD If the *Diversity Mode* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, the DRNS shall apply cell specific transmit diversity configuration and if the *Diversity Mode* IE is not set to "None" the DRNS 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 power offset for S-CPICH for MIMO Request indicator and MIMO activation indicator have been configured for the secondary serving HS-DSCH radio link in the new configuration and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO* 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 zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request indicator and MIMO with four transmit antennas activation indicator or Dual Stream MIMO with four transmit antennas activation indicator have been configured for the secondary serving HS-DSCH radio link in the new configuration and MIMO with four transmit antennas Pilot Configuration is set up with a non zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO with four transmit antennas* 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 zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]

#### [FDD – Additional Serving E-DCH Radio Link Change to an existing additional non serving E-DCH RL:]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *C-ID* IE in the *Additional HS Cell Information RL Reconf Prep* IE and an additional non serving E-DCH RL exists in the cell indicated by the *C-ID* IE, the *HS-PDSCH RL ID* IE in the *Additional HS Cell Information RL Reconf Prep* IE indicates the new Additional Serving E-DCH Radio Link.]

- [FDD If the old Additional Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Serving Additional E-DCH Radio Link at the activation of the new configuration.]
- [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Additional 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 *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNS may include the Serving Grant Value IE and Primary/Secondary Grant Selector IE in the E-DCH FDD DL Control Channel Information IE in the Additional Modified E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message for the initial grant for the Additional serving E-DCH RL and may include the Default Serving Grant in DTX Cycle 2 IE.]
- [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE in the Additional Modified E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNS 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 Additional Modified E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message for every E-DCH Radio Link on secondary UL frequency in the DRNS. If the DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE in the E-DCH FDD DL Control Channel Information IE then it shall insert the E-RGCH and E-HICH Channelisation Code Validity Indicator IE in the E-DCH FDD DL Control Channel Information IE, to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]

#### [FDD – Additional Serving E-DCH Radio Link Change to a new RL:]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Additional E-DCH RL* Specific Information To Add IE in the Additional E-DCH Configuration Change Information IE in the Additional E-DCH Cell Information RL Reconf Prep IE and the C-ID IE in the Additional HS Cell Information RL Reconf Prep IE and there is no radio links in the cell indicated by the C-ID IE for the UE context, the HS-PDSCH RL ID IE indicates the new Additional Serving E-DCH Radio Link on secondary UL frequency.]

- [FDD If the old Additional Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Additional Serving E-DCH Radio Link at the activation of the new configuration.]
- [FDD In the new configuration the DRNS shall allocate the E-DCH resources for the new additional serving E-DCH Radio Link on the secondary UL frequency. Non cell specific E-DCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Additional 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 *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNS may include in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message the *Serving Grant Value* IE

and *Primary/Secondary Grant Selector* IE for the initial grant for the additional serving E-DCH RL and may include the *Default Serving Grant in DTX Cycle 2* IE.]

 [FDD – If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf 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 DRNC shall include the HS-DSCH Initial Capacity Allocation IE for each HS-DSCH MAC-d flow being modified for which the establishment of one or several new Priority Queues was requested, if the DRNS allows the SRNC to start the transmission of MAC-d PDUs for the Priority Queue(s) being established before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. 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 DRNC 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 I 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 *Traffic Class* IE in the *HS-DSCH Information To Modify* IE for a specific HS-DSCH MAC-d flow, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this specific HS-DSCH MAC-d flow indicates the value "RRC".
- 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To Modify* IE, the DRNS 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 DRNS 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 in the *HS-DSCH Information To Modify* IE, then the DRNS 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 DRNS 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 DRNS 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 DRNS 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.]

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- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To Modify* IE, the DRNS 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 PREPARE message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To Modify* IE, the DRNS shall use the indicated power offset in the new configuration.]
- [FDD If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the DRNS may modify the HS-SCCH codes corresponding to the HS-DSCH. The DRNC 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.]
- [FDD If the HS-DSCH Information To Modify IE includes the HS-PDSCH Code Change Grant IE, then the
  DRNS may modify the HS-PDSCH codes corresponding to the HS-DSCH. The DRNC 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
  DRNS is not in Continuous Packet Connectivity HS-SCCH less mode, the SRNC shall not include the HSPDSCH Code Change Grant IE in the HS-DSCH Information To Modify IE.]
- [TDD If the HS-DSCH Information To Modify IE includes the HS-SCCH Code Change Grant IE, then the DRNS may modify the HS-SCCH parameters corresponding to the HS-DSCH. The DRNC 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 IE] [1.28Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68 Mcps TDD HS-SCCH Specific Information Response 7.68 Mcps 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 To Modify* IE, then the DRNS shall use the indicated HARQ Preamble Mode in the new configuration as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC 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 DRNC 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 DRNS shall use, in the new configuration, the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).
- [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 DRNS shall use this information in the new configuration.]
- [FDD If the *MIMO Mode Indicator* IE or *MIMO with four transmit antennas Mode Indicator* IE, or *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Information To Modify* IE, then:]
  - [FDD The DRNS shall activate/deactivate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link in the new configuration in accordance with the *MIMO Mode Indicator* IE or *MIMO with four transmit antennas Mode Indicator* IE, or *Dual Stream MIMO with four transmit antennas Activation Indicator* IE.]
  - [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate", then the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas or Dual Stream MIMO with four transmit antennas and include the MIMO Information Response IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD If the *MIMO Mode Indicator* IE is set to "Activate" and *Power Offset For S-CPICH for MIMO Request Indicator* IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-

DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Information Response* IE. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]

- [FDD If the MIMO with four transmit antennas Mode Indicator IE is set to "Activate" or the Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Information Response IE. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]
- [FDD The DRNC 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 *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH Information To Modify* IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS 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 DRNS 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 DRNS shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in TS 25.321 [41] for HS-DSCH Transport Block Size signalling.]
- [1.28Mcps TDD If the *MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify* IE, then:]
  - [1.28Mcps TDD The DRNS shall activate/deactivate the MIMO mode for the HS-DSCH Radio Link in the new configuration in accordance with the *MIMO Mode Indicator* IE.]
  - [1.28 Mcps TDD If the MIMO Mode Indicator IE is set to "Activate", then the DRNS 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.]
- [1.28Mcps TDD The DRNC 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 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.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH Information To Modify* IE, the *DL RLC PDU Size Format* IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD If the UE Support Indicator Extension IE is included in the HS-DSCH Information To Modify IE the DRNS may use the supported HSDPA functions for this UE.]
- [FDD If the UE Support Indicator Extension IE is included in the HS-DSCH Information To Modify IE with the bit UE DTXDRX related HS-SCCH orders uniform behavior indicator set to 0, then the DRNS shall, if supported, include the Support of dynamic DTXDRX related HS-SCCH order IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD – If the *Single Stream MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify* IE, then the DRNS shall activate/deactivate the Single Stream MIMO for the HS-DSCH Radio Link in accordance with the *Single Stream MIMO Mode Indicator* IE.]

#### [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, then:]

- [FDD If the HS-SCCH Power Offset IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE, the DRNS 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 HS-DSCH FDD Secondary Serving Information To Modify IE includes the HS-SCCH Code Change Grant IE, then the DRNS may modify the HS-SCCH codes corresponding to the secondary serving HS-DSCH. The DRNC 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 MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE, then the DRNS shall activate/deactivate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link in accordance with the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE.]
- [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE, is set to "Activate", then the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas or Dual Stream MIMO with four transmit antennas and include the MIMO 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 MIMO Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO 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 zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
- [FDD If the *MIMO with four transmit antennas Mode Indicator* IE is set to "Activate" or the *Dual Stream MIMO with four transmit antennas Mode Indicator* IE is set to "Activate" and *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO with four transmit antennas* 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 zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]
- [FDD If the *Single Stream MIMO Mode Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information To Modify* IE, then the DRNS shall activate/deactivate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link in accordance with the *Single Stream MIMO Mode Indicator* IE.]
- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information To Modify* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS 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 DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondaery serving HS-DSCH, then the DRNC 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 TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD If the *Diversity Mode* IE is included, then:]
  - [FDD the DRNS 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 DRNS 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 DRNS 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 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 UE Context, then the DRNC shall delete the HS-DSCH configuration from the UE 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 DRNS may use the Traffic Class IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If TrCH Source Statistics Descriptor IE is present with the value "RRC" in the HS-DSCH MAC-d Flows Information IE, then the DRNC should ignore the Traffic Class 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- The DRNC shall include the HS-DSH Initial Capacity Allocation IE in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being added, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If the UE context is configured to use the "Flexible MAC-d PDU Size" format for the HS-DSCH, then DRNC 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 I 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 DRNS 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 DRNS 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 DRNC 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 DRNC 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 RADIO LINK RECONFIGURATION PREPARE message includes DL RLC PDU Size Format IE for a Priority Queue in the HS-DSCH MAC-d Flows To Add IE, the DL RLC PDU Size Format IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, the DRNS shall, if supported, consider the data of the related HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]

### [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 DRNS shall, if supported, preconfigure the indicated cells for Enhanced HS Serving Cell Change according to TS 25.308 [63]:]

- [FDD The DRNS 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 *Secondary C-ID* IEsin 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 TS 25.214 [10].
- [FDD The DRNS shall return these codes in the *Sets of HS-SCCH Codes* IE along with the corresponding percell *HS-DSCH-RNTI* IE in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE of the RADIO LINK RECONFIGURATION READY.]
- [FDD The DRNS shall use the first in the numbered list the primary serving HS-DSCH cell's of HS-SCCH codes in the HS-SCCH Preconfigured Codes IE sent to the SRNC to signal the Target Cell HS-SCCH Order defined in TS 25.331 [16].]
- [FDD The DRNS 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 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 *MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE.]
- [FDD if *Dual Stream MIMO with four transmit antennas 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 preconfiguration 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 DRNS shall store this information in the preconfigured configuration.]
- [FDD the *SixtyfourQAM DL Support Indicator* IE may be included.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS may store this information in the preconfigured configuration.]
- [FDD If the UE Support Indicator Extension IE is included in the HS-DSCH Preconfiguration Setup IE with the bit UE DTXDRX related HS-SCCH orders uniform behavior indicator set to 0, then the DRNS shall, if supported, include the Support of dynamic DTXDRX related HS-SCCH order IE in the HS-DSCH Preconfiguration Info IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD the DRNS shall, if supported, include in the Sets of HS-SCCH Codes IE the Measurement Power Offset IE for each preconfigured cell.]
- [FDD The DRNS 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 DRNS 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 DRNS may preconfigure 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 Power Offset For S-CPICH for MIMO Request 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 DRNC
  shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up on the cell with a
  non-zero power offset where HS-DSCH / secondary HS-DSCH is preconfigured, include the Power Offset For
  S-CPICH for MIMO IE in the HS-DSCH Preconfiguration Info IE or in the Sets of HS-SCCH Codes IE in the
  HS-DSCH Preconfiguration Info IE for each preconfigured cell in the RADIO LINK RECONFIGURATION
  READY message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO 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 DRNS", the DRNC 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 RECONFIGURATION READY message.]

- [FDD if the choice of *new Serving RL* is "New Serving RL Not in the DRNS", the DRNC 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 DRNS or New Serving RL Not in the DRNS", the DRNC 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 if the Additional E-DCH Non-Serving RL Preconfiguration Setup IE is included, the DRNC 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 according to the choice of new Serving RL in Additional E-DCH New non-serving RL E-DCH FDD DL Control Channel Information IE for the additional non serving E-DCH 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 DRNS for the UE context, the DRNS may execute the Enhanced HS Serving Cell Change procedure according to [63].]

[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 DRNS shall not execute the synchronized Enhanced HS Serving Cell Change procedure when performing the Serving HS-DSCH Radio Link Change or the HS-DSCH Setup.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Non-Serving RL Preconfiguration Removal* IE, the DRNS shall remove the corresponding preconfigured E-DCH DL Control Channel Information according to the information.]

#### [FDD - Multiflow Setup:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Multiflow Information* IE in *HS*-*DSCH Information* IE, or *Multiflow Reconfiguration* IE in *HS*-*DSCH Information To Modify* IE and the choice of Setup or Change or Stop is "Setup", then the DRNS shall setup the requested Multiflow operation.]

#### [FDD - Multiflow Modification:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes *Multiflow Reconfiguration* IE in *HS*-*DSCH Information To Modify* IE and the choice of Setup or Change or Stop is "Change", then the DRNS shall apply the new configuration.]

#### [FDD - Multiflow Removal:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Multiflow Reconfiguration* IE in *HS-DSCH Information To Modify* IE, and the choice of Setup or Change or Stop is "Stop", then the DRNS shall terminate the Multiflow operation.]

#### [FDD – E-DCH Setup:]

[FDD – If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION PREPARE message then:]

- [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 DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH FDD Information* IE, then the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]

- [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 DRNS 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 (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [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 DRNS shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the DRNS 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 DRNS 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 DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [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 DRNS 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 *Bundling Mode Indicator* IE for a 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 DRNS shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the DRNS 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 DRNS 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 DRNS 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 DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH ReferencePower* Offset IE, then the DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]

#### [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 DRNC shall setup the E-DCH resources, as requested or as configured in the UE context, on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The DRNC 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 DRNC 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 DRNC shall remove the E-DCH resources, if any, on the Radio Links, that are indicated by the *E*-DCH *RL Indication* IE set to "Non E-DCH", in the *RL Information* IE.]
- [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 DRNS would contain the E-DCH serving RL, the DRNS 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 SRNC 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 ID* IE, this indicates the new Serving E-DCH Radio Link:]

- [FDD If the old Serving E-DCH RL is within this DRNS, the DRNS 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 within this DRNS:]
  - [FDD the DRNS 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 *RL Information Response* IE for the indicated RL in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD The DRNS 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 DRNS 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 a serving cell change is performed the RADIO LINK RECONFIGURATION READY message may contain invalid data (see 9.2.2.4C).]

- [FDD The DRNS 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 DRNS 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 DRNS.]
- [FDD If the DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message, then it shall insert the *E-RGCH and E-HICH Channelisation Code Validity Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE, to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]

#### [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 DRNS 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 *E-DCH MAC-d PDU Size* Format IE in the *E-DCH FDD Information To Modify* IE, then the DRNS shall use the indicated format in user plane frame structure for E-DCH channels (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [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 DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD –If the *Traffic Class* IE is included for an E-DCH MAC-d flow then the DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this specific E-DCH MAC-d flow indicates the value "RRC".]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Data Description Indicator* IE, the DRNC shall use the DDI values indicated in the *Data Description Indicator* IE in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH FDD Information To Modify* IE, the DRNS 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 To Modify* IE, then the DRNS 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 *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow in the *E-DCH FDD Information To Modify* IE, then the DRNS 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 DRNS shall use this information for calculating the unquantised gain factor for an E-TFC (β<sub>ed.i.ua</sub>) as defined in TS 25.214 [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 DRNS shall use this information 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 Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS 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 DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [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 DRNS 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 DRNS 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 DRNS shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the DRNS 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 DRNS 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 DRNS shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the DRNS 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 DRNS shall use this information for the related resource allocation operation.]
- [FDD If the E-DCH serving RL is in this DRNS, the DRNS may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission. In this case the DRNS 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 DRNS 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 DRNS 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 DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH ReferencePower Offset* IE, then the DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]
- [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 DRNS 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 DRNC 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:]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DCH MAC-d Flows To Add* IE, then the DRNS shall use this information to add the indicated E-DCH MAC-d flows.]

[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 DRNS 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 Flows To Add* IE, then:]

- [FDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [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 MAC-d Flows To Add* IE, the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *E-DCH Logical Channel Information IE* in the *E-DCH MAC-d Flows To Add* IE, the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]

#### [FDD – E-DCH MAC-d Flow Deletion:]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an E-DCH *MAC-d Flows To Delete* IEs, then the DRNS shall use this information to delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration shall also be removed.]

[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 UE Context, then the DRNC shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.]

#### [FDD – Additional E-DCH Setup:]

[FDD – If the *Additional E-DCH Cell Information RL Reconf Prep* IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the choice of *Setup, Configuration Change or Removal of E-DCH On* 

*Secondary UL Frequency* is "Setup", then the *Additional E-DCH Cell Information Setup* IE defines the new configuration and then:]

- [FDD If the *C-ID* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *C-ID* IE indicates the cell in which the additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the Additional E-DCH on the secondary uplink frequency and setup the requested Additional E-DCH resources on the Radio Links and in the cells indicated by the *E-DCH Additional RL ID* IE and the *C-ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD If the *C-ID* IE is not included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *E-DCH Additional RL ID* IE indicates the existing RL on which the Additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the additional E-DCH on the Radio Links indicated by the *E-DCH Additional RL ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD The DRNS shall use for the non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the *UL SIR Target* IE in the *UL DPCH Information* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE and/or the *DL Power Balancing Information* IE and/or the *Minimum Reduced E-DPDCH Gain Factor* IE in the *Multicell E-DCH Information* IE in the *Additional E-DCH FDD Setup Information* IE are present, the DRNS shall use the information in the same same way as for the information used on Primary uplink frequency.]
- [FDD If the Secondary UL Frequency Activation State IE is present in the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE, the DRNS shall use the information as initial activation state of the Radio Links on the secondary uplink frequency.]
- [FDD If the *Initial DL Tx Power* IE, the *Primary CPICH Ec/No* IE, the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE and/or the *E-HICH Power Offset* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the *Enhanced Primary CPICH Ec/No* IE is included in the *Multicell E-DCH RL Specific Information* IE in the *Additional E-DCH Secondary RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the F-DPCH Slot Format Support Request IE in the F-DPCH Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE is included, the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211 [8] and include the F-DPCH Slot Format IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response IE in the Additional E-DCH Cell Information Response RL Reconf IE in the RADIO RECONFIGURATION READY message. If the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE includes the F-DPCH Slot Format IE, the DRNS may use the F-DPCH Slot Format IE to determine the F-DPCH slot format.]
- [FDD If the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the E-DCH Maximum Bitrate IE, the E-DCH Minimum Set E-TFCI IE and/or the E-DCH Processing Overload Level IE are present in the Additional E-DCH FDD Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If activation of power balancing for the Additional E-DCH RL by the RADIO LINK RECONFIGURATION PREPARE message is supported by the DRNS, the DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message to a value that uniquely identifies the RL as a RL Set within the UE Context. The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]
- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]
- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set a same value to the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the *Additional E-DCH FDD Information Response* IE in the *AdditionalE-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD For every additional E-DCH RL indicated in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the DRNS 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 DRNS may include the corresponding *E-RGCH Signature Sequence* IE for each Additional E-DCH RL in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *AdditionalE-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message and if DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE, then it shall insert the *E-RGCH and E-HICH Channelisation Code Validity Indicator* IE to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]
- [FDD If the Additional Serving E-DCH Radio Link is configured in the DRNS, then:]
  - [FDD The DRNS 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 *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD The DRNS may include in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message the Serving Grant Value IE and Primary/Secondary Grant Selector IE for the initial grant for the Additional serving E-DCH RL and may include the Default Serving Grant in DTX Cycle 2 IE.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If Primary CPICH is not to be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE RADIO LINK RECONFIGURATION READY message.]
- [FDD If Secondary CPICH may be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Secondary CPICH Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message. If the DRNS doesn't include the *Secondary CPICH Information* IE, it shall not include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used".]

#### [FDD – Additional E-DCH Configuration Change]

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[FDD – If the Additional E-DCH Cell Information RL Reconf Prep IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the choice of Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency is "Configuration Change", then the Additional E-DCH Cell Information Configuration Change IE defines the new configuration and then:]

- [FDD If the *UL Scrambling Code* IE and/or the *UL SIR Target* IE are present in the *UL DPCH Information* IE in the *Additional E-DCH Configuration Change Information* IE and/or id the *Minimum Reduced E-DPDCH Gain Factor* IE is present in the *Multicell E-DCH Information* IE in the *Additional E-DCH Configuration Change Information* IE, the DRNS shall use the information in the same way as for the information that is used on the Primary uplink frequency.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *F-DPCH Information* IE in the *Additional E-DCH Configuration Change Information* IE, then:]
  - [FDD The DRNS shall configure the concerned UE Context to use F-DPCH in the downlink in the new configuration.]
  - [FDD If the *F-DPCH Information* IE includes the *F-DPCH Slot Format Support Request* IE, then the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211
     [8] and include the *F-DPCH Slot Format* IE in the Additional E-DCH FDD Information Response IE for new RLs on the secondary UL frequency or in the Additional Modified E-DCH FDD Information Response IE for modified RLs in the RADIO LINK RECONFIGURATION READY message. If the Multicell E-DCH Information IE in the Additional E-DCH Configuration Change Information IE includes the F-DPCH Slot Format IE to determine the F-DPCH slot format.]

#### [FDD – Additional E-DCH RL Addition:]

[FDD – If the Additional E-DCH RL Specific Information To Add IE is present in the Additional E-DCH Configuration Change Information IE, then:]

- [FDD The DRNS shall setup the E-DCH resources, as requested or as configured in the UE context, on the Radio Links indicated by the *E-DCH Additional RL ID* IE. Non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE, the *E-HICH Power Offset* IE is included, the DRNS shall use the information in the same way as for information is used on the Primary uplink frequency.]
- [FDD If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Individual" in the existing Additional E-DCH RL(s) and the RADIO LINK RECONFIGURATION PREPARE message includes the *DL Reference Power* IE in the *Multicell E-DCH RL Specific Information* IE, the DRNS shall activate the power balancing and use the *DL Reference Power* IE for the power balancing procedure in the new Additional RL(s), if activation of power balancing by the RADIO LINK RECONFIGURATION PREPARE message at RL addition on secondary UL frequency is supported, according to subclause 8.3.15. In this case, the DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message. If the DRNS 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 which is calculated based on the following IEs (if received): *Primary CPICH Ec/No* IE or the *Enhanced Primary CPICH Ec/No* IE in the *Multicell E-DCH RL Specific Information* IE or to the power level which is calculated based on the power relative to the Primary CPICH power used by the existing Additional RLs.]
- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message to a value that uniquely identifies the RL as a RL Set within the UE Context. The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]
- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same

value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]

- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set a same value to the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message]
- [FDD For every additional E-DCH RL indicated in the Additional E-DCH RL Specific Information To Add IE, the DRNS 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 DRNS may include the corresponding E-RGCH Signature Sequence IE in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message and if DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE, then it shall insert the E-RGCH/E-HICH Channelisation Code Validity Indicator IE to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]
- [FDD If the *Primary CPICH Ec/No* IE or the *Primary CPICH Ec/No* IE and the *Enhanced Primary CPICH Ec/No* IE in the *Multicell E-DCH RL Specific Information* IE measured by the UE are included for a RL in the RADIO LINK RECONFIGURATION PREPARE message, the DRNS shall use this in the calculation of the Initial DL TX Power for this additional RL. If the *Primary CPICH Ec/No* IE is not present, the DRNS shall set the Initial DL TX Power based on the power relative to the Primary CPICH power used by the existing RLs.]

#### [FDD – Additional E-DCH RL Modification:]

[FDD – If the Additional E-DCH RL Specific Information To Modify IE is present in the Additional E-DCH Configuration Change Information IE, then the RL indicated by the E-DCH Additional RL ID IE indicates the RL on which E-DCH resources shall be modified:]

- [FDD If the E-AGCH Power Offset IE, the E-RGCH Power Offset IE, the E-HICH Power Offset IE, and/or the E-DCH DL Control Channel Grant IE in the Multicell E-DCH RL Specific Information IE is included, the DRNS shall use the information in the same way as for the information used on the Primary uplink frequency.]
- [FDD If the *DL Reference Power* IEs is included in the *Multicell E-DCH RL Specific Information* IE and power balancing is active, DRNS shall apply DL power Control in the same way as defined for the Primary uplink frequency.]
- [FDD If updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported by the DRNS, the DRNS shall include the *DL Power Balancing Updated Indicator* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE for each affected RL in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the *Phase Reference Update Indicator* IE is included in the *Multicell E-DCH RL Specific Information* IE, DRNS shall modify the channel estimation information according to TS 25.214 [10] subclause 4.3.2.1 and set the value(s) in *Primary CPICH Usage For Channel Estimation* IE and/or *Secondary CPICH Information Change* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message accordingly.]
- [FDD If the RADIO LINK RECONFIGURATION READY message includes the *Primary CPICH Usage For Channel Estimation* IE and/or the *Secondary CPICH Information Change* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE, the DRNS shall avoid the new configuration in which neither the Primary CPICH nor the Secondary CPICH is used as a Phase Reference for this Radio Link.]

#### [FDD – Additional E-DCH Modification:]

[FDD – If the Additional E-DCH FDD Information To Modify IE is present in the Additional E-DCH Configuration Change Information IE, then:]

- [FDD If the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the E-DCH Minimum Set E-TFCI IE and/or the E-DCH Maximum Bitrate IE is included, the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the *E-DCH Processing Overload Level* IE is included, then if the DRNS 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 DRNS shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the DL TX power upper or lower limit has been re-configured for the secondary UL frequency, the DRNS shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s), and the DRNS shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE for each Radio Link when these values are changed.]
- [FDD If the Additional E-DCH serving RL is in this DRNS, the DRNS may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission. In this case the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE in the Additional Modified E-DCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

#### [FDD – Additional E-DCH Removal]

[FDD – If the Additional E-DCH Cell Information RL Reconf Prep IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the choice of Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency is "Removal", then the additional E-DCH on the secondary uplink frequency shall be removed.]

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

[1.28Mcps TDD –If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC 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 – Shared physical channels Synchronisation Detection:]

[1.28Mcps TDD – If HS-PDSCH and E-PUCH are configured but no DPCH is configured for the UE, then the DRNS shall include the *Out-of-sync Detection Window* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

#### [1.28Mcps TDD – Uplink Timing Advance Control LCR:]

[1.28Mcps TDD – The DRNC shall include the *Uplink Timing Advance Control LCR* IE in the RADIO LINK RECONFIGURATION READY message, if the Uplink Timing Advance Control parameters have been changed.]

#### [1.28Mcps TDD – PowerControl GAP:]

[1.28Mcps TDD – If applied in the DRNS, the DRNC may include the *PowerControl GAP* IE in the RADIO LINK RECONFIGURATION READY message.]

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

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Need for Idle Interval* IE set to "TRUE", if supported, the DRNC shall include the *Idle Interval Information* IE in the RADIO LINK

RECONFIGURATION READY message. If the *Need for Idle Interval* IE is set to "FALSE", the DRNC shall delete the configuration related to E-UTRAN Inter-RAT measurement ]

# [1.28Mcps TDD – RNTI Allocation Indicator:]

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *RNTI Allocation Indicator* IE, if supported, the DRNS may allocate an E-RNTI and/or an H-RNTI for UE to use in CELL\_FACH state.]

# [1.28Mcps TDD – Inter-frequency/ Inter-RAT measurement:]

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *DCH Measurement Type indicator* IE, if supported, the DRNS shall include the *Measurement purpose* IE and the *Measurement occasion pattern sequence parameters* IE in the *DCH Measurement Occasion Information* IE in the RADIO LINK RECONFIGURATION READY message to configure the measurement occasion pattern(s) indicated by the *DCH Measurement Type indicator* IE.]

# [TDD – DSCH RNTI Addition/Deletion:]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *PDSCH RL ID* IE, then the DRNS shall use it as the new RL identifier for PDSCH and PUSCH.]

- [TDD If the indicated PDSCH RL ID is in the DRNS and there was no DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a DSCH-RNTI to the UE Context and include the *DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD If the indicated PDSCH RL ID is in the DRNS and there was a DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a new DSCH-RNTI to the UE Context, release the old DSCH-RNTI and include the *DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD If the indicated PDSCH RL ID is not in the DRNS and there was a DSCH-RNTI allocated to the UE Context, the DRNC shall release this DSCH-RNTI.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DSCHs To Delete* IE and/or a *USCHs To Delete* IE which results in the deletion of all DSCH and USCH resources for the UE Context, then the DRNC shall release the DSCH-RNTI allocated to the UE Context, if there was one.]

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

[FDD – If Primary CPICH usage for channel estimation information has been reconfigured, the DRNC shall include the *Primary CPICH Usage For Channel Estimation* IE in the RADIO LINK RECONFIGURATION READY message.]

[FDD – If Secondary CPICH information for channel estimation has been reconfigured, the DRNC shall include the *Secondary CPICH Information Change* IE in the RADIO LINK RECONFIGURATION READY message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes *Phase Reference Update Indicator* IE, DRNC shall modify the channel estimation information according to TS 25.214 [10] subclause 4.3.2.1 and set the value(s) in *Primary CPICH Usage For Channel Estimation* IE and/or *Secondary CPICH Information Change* IE in the RADIO LINK RECONFIGURATION READY message accordingly.]

[FDD – If the RADIO LINK RECONFIGURATION READY message includes the *Primary CPICH Usage For Channel Estimation* IE and/or the *Secondary CPICH Information Change* IE, the DRNC shall avoid the new configuration in which neither the Primary CPICH nor the Secondary CPICH is used as a Phase Reference for this Radio Link.]

#### [FDD – Fast Reconfiguration:]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Fast Reconfiguration Mode* IE, the DRNS 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.]

# [TDD – Intra- DRNS 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 DRNS 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.]
- [3.84Mcps TDD The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* IE in the *E-DCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28Mcps TDD The DRNS shall allocate E-AGCH parameters and E-HICH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* IE and the *E-HICH Specific Information Response* IE in the *E-DCH Information Response* 1.28Mcps IE in the RADIO LINK RECONFIGURATION READY message.]
- [7.68Mcps TDD The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* 7.68Mcps IE in the *E-DCH TDD Information Response* 7.68Mcps 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 DRNS to determine the transport bearer characteristics to apply in the uplink 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 DRNS 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 DRNS shall apply the parameters to the new configuration.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *E*- *TFCS Information* IE, the DRNS 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 and *E-DCH TDD Information* IE.]

#### [1.28Mcps TDD – E-DCH Setup:]

[1.28cps TDD – the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH informationelements: *E-DCH Serving RL* IE, *E-PUCH Information LCR* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE and *E-DCH TDD Information LCR* IE.]

[1.28Mcps TDD - If the UE TSO Capability LCR IE in the UE Capabilities Information IE in the HS-DSCH Information To Modify IE is not present, or if the UE TSO Capability LCR IE in the UE Capabilities Information IE in the HS-DSCH Information IE is not present, and if the RADIO LINK RECONFIGURATION PREPARE message includes the UE TSO Capability LCR IE in the E-DCH TDD Information LCR IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

#### [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 and *E-DCH TDD Information* 7.68Mcps IE.]

#### [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 DRNS 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 DRNS 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 UE Context, then the DRNS shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.]

[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 DRNS 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 LCR IE in the E-DCH Logical Channel Information IE in the E-DCH MAC-d Flows To Add IE, the DRNS 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 – The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information TDD* IE in the *E-DCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

### [1.28Mcps TDD – E-DCH Non-scheduled allocations:]

[1.28Mcps – The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information LCR TDD* IE in the *E-DCH Information Response 1.28Mcps* IE in the RADIO LINK RECONFIGURATION READY message.]

# [7.68Mcps TDD – E-DCH Non-scheduled allocations:]

[7.68Mcps TDD – The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information* 7.68Mcps *TDD* IE in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK RECONFIGURATION READY message.]

# [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 DRNS 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 DRNS shall use the indicated format in user plane frame structure for E-DCH channels (TS 25.425 [32]) and MAC (TS 25.321 [41]).]

#### [3.84Mcps TDD – E-DCH Modification:]

[3.84Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH TDD Information* 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 DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [3.84Mcps TDD If the *E-DCH TDD Information* IE includes the *E-DCH Processing Overload Level* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [3.84Mcps TDD If the *E-DCH TDD Information* IE includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]

# [1.28Mcps TDD – E-DCH Modification:]

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH TDD Information LCR* IE, then:]

- [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 DRNS 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 Processing Overload Level* IE for an E-DCH, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS 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 DRNS shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *Multi-Carrier E-DCH Physical Layer Category LCR* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for multi-carrier E-DCH scheduling.]
- [1.28Mcps TDD If the UE TSO Capability LCR IE in the UE Capabilities Information IE in the HS-DSCH Information To Modify IE is not present, or if the UE TSO Capability LCR IE in the UE Capabilities Information IE in the HS-DSCH Information IE is not present, and if the RADIO LINK RECONFIGURATION PREPARE message includes the UE TSO Capability LCR IE in the E-DCH TDD Information LCR IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

#### [7.68Mcps TDD – E-DCH Modification:]

[7.68Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH TDD Information 7.68Mcps* IE, then:]

- [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 DRNS 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 Processing Overload Level* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [7.68Mcps TDD If the *E-DCH TDD Information 7.68Mcps* IE includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]

[TDD- If the RADIO LINK RECONFIGURATION PREPARE 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 DRNS 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 contains a *TNL QoS* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]

- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the DRNS 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 includes the *E-DCH MAC-d Flow Retransmission Timer* IE for an E-DCH MAC-d flow then the DRNS shall use this information to set the retransmission timer.]
- [TDD– If the *TNL QoS* IE is included in the *E-DCH TDD Information to Modify* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH HARQ Power Offset TDD* IE for an E-DCH MAC-d flow the DRNS 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 DRNS shall use this information for the related resource allocation operation.]
- [TDD- If the *E-DCH TDD Information To Modify* IE contains the *E-DCH Grant Type* IE, the DRNS 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 DRNS 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 DRNS 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 DRNS shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the DRNS 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 DRNS shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *E-DCH DDI Value* IE, the DRNS 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 LCR* IE, the DRNS 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 the *Maximum MAC-d PDU Size Extended* IE, the DRNS 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, then the DRNS 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 –Multi-Carrier E-DCH Continue:]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the choice of *Continue, Setup or Change* is "Continue", then the current Multi-Carrier E-DCH configuration shall not be changed.]

#### [1.28Mcps TDD – Multi-Carrier E-DCH Setup:]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the choice of *Continue, Setup or Change* is "Setup", then the *Multi-Carrier E-DCH Information LCR* IE defines the new configuration and then:]

- [1.28Mcps TDD The DRNS shall use the *Multi-Carrier E-DCH Transport Bearer Mode LCR* IE to decide the transport bearer mode in the new configuration.]
- [1.28Mcps TDD The DRNS shall setup the requested E-DCH resource on the uplink frequecies indicated by the UARFCN IE in the Multi-Carrier E-DCH Information LCR IE.]

#### [1.28Mcps TDD – Multi-Carrier E-DCH Change:]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the choice of *Continue, Setup or Change* is "Change", then: the *Multi-Carrier E-DCH Information LCR* IE defines the new configuration and then:]

- [1.28Mcps TDD If the UARFCN IE in the Multi-Carrier E-DCH Information LCR IE is different from current configured frequencies, then the DRNS shall setup the E-DCH resources, as requested in the DRNS Communication Context, on the uplink frequecies indicated by the UARFCN IE in the Multi-Carrier E-DCH Information LCR IE.]
- [1.28Mcps TDD If the *UARFCN* IE in the *Multi-Carrier E-DCH Information LCR* IE is the same as any current configured frequency, then the DRNS shall reconfigure the E-DCH resources, as requested or as configured in the DRNS Communication Context, on the uplink frequecies indicated by the *UARFCN* IE in the *Multi-Carrier E-DCH Information LCR* IE.]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the choice of *Continue, Setup or Change* is "Change" and the *Removal UL Multi-Carrier info* IE is included, then the DRNS shall remove the corresponding E-DCH configuration on the uplink frequencies indicated by the *UARFCN* IE in the *Removal UL Multi-Carrier info* IE.]

#### General

If the requested modifications are allowed by the DRNC and the DRNC has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the SRNC 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.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IE in the [TDD – *DSCHs To Modify* IE, *DSCHs To Add* IE, *USCHs To Modify* IE, *USCHs To Add* IE], *HS-DSCH Information To Modify* 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,] [TDD – *E-DCH TDD Information to Modify* IE,] or in the *RL Specific DCH Information* IEs, the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for any Transport Channel [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included], HS-DSCH MAC-d flow being added or E-DCH MAC-d flow [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included] being added, or any Transport Channel, HS-DSCH MAC-d flow or E-DCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

The DRNC 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 is not included], HS-DSCH MAC-d flow being added or E-DCH 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], HS-DSCH MAC-d flow [FDD – for which the *Transport Bearer Not Requested Indicator* IE was not included], HS-DSCH MAC-d flow or E-DCH MAC-d flow [FDD – for which the *Transport Bearer Not Requested Indicator* IE was not included], HS-DSCH MAC-d flow or E-DCH 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 Iur 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 the corresponding DCH,] for only one of the DCHs 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 DRNC 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 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 DRNC establishes a transport bearer for the concerned DCH or E-DCH MAC-d flow, the DRNC 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 DRNC does not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow, the DRNC 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 DRNS, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included for only one of the combined Radio Links [FDD – if the *Transport Bearer Not Requested Indicator* IE is not included for this DCH of the Radio Link].

[FDD – In the case of an E-DCH RL being combined with another E-DCH RL within the DRNS, the *E-DCH FDD Information Response* IE shall be included only for one of the combined E-DCH RLs.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Additional E-DCH Cell Information RL Reconf Prep* IE, then:]

- [FDD if the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "Separate Iur Transport Bearer Mode" the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]
- [FDD if the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "UL Flow Multiplexing Mode" the DRNS shall use this mode in the new configuration and multiplex MAC-d flows on the transport bearers.]
- [FDD if Separate Iur Transport Bearer Mode is used in the new configuration, then:]
  - [FDD the DRNS shall follow the rules defined in this procedure for single carrier mode of operation for establishment of the transport bearer for a MAC-d flow, use the *Transport Bearer Not Requested Indicator* IE in the *RL Specific E-DCH Information* IE in the *RL Information* IE and/or the *Transport Bearer Request Indicator* IE in the *E-DCH FDD Information To Modify* IE received for the corresponding Radio Link(s) of the Primary Uplink Frequency to determine the transport bearer configuration in the new configuration for the radio links of the Secondary Uplink Frequency.]
  - [FDD If the Transport Layer Address IE and Binding ID IE is included for an E-DCH MAC-d flow in the Additional E-DCH MAC-d Flows Specific Information IE in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE or in the Additional E-DCH RL Specific Information To Add IE and/or the Additional E-DCH RL Specific Information To Modify IE in the Additional E-DCH Configuration Change Information IE in the Additional E-DCH Cell Information Configuration Change IE, then the DRNS may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow the DRNS shall, for establishment of the transport bearer, include in the RADIO LINK RECONFIGURATION READY message in the Additional E-DCH Cell Information Response RLReconf IE the Binding ID IE and Transport Layer Address IE in the Additional E-DCH FDD Information Response IE for new E-DCH radio links on the Secondary UL frequency and/or include the Binding ID IE and Transport Layer Address IE in the Additional E-DCH MAC-d Flow Specific Information Response IE for new E-DCH FDD Information Response IE for the Address IE in the Additional E-DCH MAC-d Flow Specific Information R

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Multi-Carrier E-DCH Information Reconf* IE, then:]

- [1.28Mcps TDD If the *Multi-carrier E-DCH Transport Bearer Mode LCR* IE is set to "Separate Iur Transport Bearer Mode" the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]
- [1.28Mcps TDD If the *Multi-Carrier E-DCH Transport Bearer Mode LCR* IE is set to "UL Flow Multiplexing Mode" the DRNS shall use this mode in the new configuration and multiplex each MAC-d flow on one transport bearer.]
- [1.28Mcps TDD If the choice of *Continue, Setup or Change* in the the *Multi-Carrier E-DCH Information Reconf* IE is "Setup" and the Separate Iur transport bearer mode is used in the new configuration, or if the choice of *Continue, Setup or Change* in the the *Multi-Carrier E-DCH Information Reconf* IE is "Change" and the Transport Bearer Mode is changed to "Separate Iur Transport Bearer Mode" indicated by *Multi-carrier E-DCH Transport Bearer Mode LCR* IE, then the DRNS shall include the *Binding ID* IE and *Transport Layer Address* IE in the *Multi-Carrier E-DCH Information Response LCR* IE in the RADIO LINK RECONFIGURATION READY message for establishment of a transport bearer for every E-DCH MAC-d flow being established.]
- [1.28Mcps TDD The DRNS shall follow the rules defined in this procedure for single carrier mode of operation for establishment of the transport bearer for a MAC-d flow, use the *Transport Bearer Request Indicator* IE in the

*E-DCH TDD Information to Modify* IE received for the corresponding Radio Link to determine the transport bearer configuration in the new configuration for the all Uplink Frequencies.]

[1.28Mcps TDD - If the E-DCH UL flow multiplexing mode is used in the new configuration and if the *Transport Bearer Request Indicator* IE is set to "Bearer Requested ", then the DRNS shall include the *Binding ID* IE and *Transport Layer Address* IE in the *E-DCH TDD Information Response 1.28Mcps* IE in the RADIO LINK RECONFIGURATION READY message for establishment of a transport bearer for every E-DCH MAC-d flow being established.]

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

Any allowed rate for the downlink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link when these values are changed.

[FDD – If the DL TX power upper or lower limit has been re-configured, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE respectively. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH or on the F-DPCH of the RL –except, if the UE Context is configured to use DPCH in the downlink, during compressed mode, when the  $\delta P_{curr}$ , as described in TS 25.214 [10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[3.84 Mcps TDD and 7.68 Mcps TDD – If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION READY message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the new value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power* IE and *CCTrCH Minimum DL TX Power*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE/*CCTrCH Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE/*CCTrCH Minimum DL TX Power* IE on any DL DPCH within each CCTrCH of the RL.]

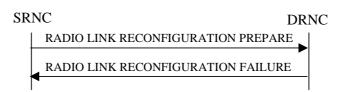
[1.28 Mcps TDD – If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION READY message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the new value(s) for that timeslot in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE or lower than indicated by the appropriate *Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appro

[TDD – If the [3.84Mcps TDD and 7.68 Mcps TDD – *DL Time Slot ISCP Info* IE][1.28Mcps TDD – *DL Time Slot ISCP Info LCR* IE] is present, the DRNS should use the indicated values when deciding the Initial DL TX Power.]

[TDD – If the *Primary CCPCH RSCP Delta* IE is included, the DRNS shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per TS 25.123 [24], 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 DRNS shall assume that the reported value is in the non-negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS shall use the indicated values when deciding the Initial DL TX Power.]

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# 8.3.4.3 Unsuccessful Operation



#### Figure 11: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

If the DRNS cannot reserve the necessary resources for all the new DCHs of a set of co-ordinated DCHs requested to be added, it shall reject 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 DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC, indicating the reason for failure for each failed radio link in a *Cause* IE.

[FDD – If the *MIMO Activation Indicator* IE is included and the *Power Offset For S-CPICH for MIMO Request Indicator* IE is not included in the HS-DSCH FDD Information IE in the *HS-DSCH FDD Information* IE in the RADIO LINK RECONFIGURATION PREPARE message or MIMO is activated and the power offset for S-CPICH for MIMO Request indicator has not been configured in the new configuration but MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the setup of the serving HS-DSCH Radio Link, and/or activation of MIMO, shall be reported as failed and the DRNC shall include in the RADIO LINK RECONFIGURATION FAILURE message the *Cause* IE.]

[FDD – If the *MIMO with four transmit antennas Activation Indicator* IE or the *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included and the *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is not included in the *HS-DSCH FDD Information* IE in the *HS-DSCH FDD Information* IE in the RADIO LINK RECONFIGURATION PREPARE message or MIMO with four transmit antennas is activated and the power offset for S-CPICH for S-CPICH for MIMO with four transmit antennas is activated and the power offset for S-CPICH for MIMO with four transmit antennas Request indicator has not been configured in the new configuration but MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the setup of the serving HS-DSCH Radio Link, and/or activation of MIMO, shall be reported as failed and the DRNC shall include in the RADIO LINK RECONFIGURATION FAILURE message the Cause IE.]

Typical cause values are:

#### **Radio Network Layer Causes:**

UL Scrambling Code Already in Use; DL Radio Resources not Available; UL Radio Resources not Available; Requested Configuration not Supported; Number of DL Codes not Supported; Number of UL Codes not Supported; Dedicated Transport Channel Type not Supported; DL Shared Channel Type not Supported; [TDD – UL Shared Channel Type not Supported;] [FDD – UL Spreading Factor not Supported;] [FDD – DL Spreading Factor not Supported;] CM not Supported; RL Timing Adjustment not Supported; E-DCH not supported; [FDD – F-DPCH not supported;] [FDD - Continuous Packet Connectivity DTX-DRX operation not Supported;] [FDD – Continuous Packet Connectivity HS-SCCH less operation not Supported;] [FDD – MIMO not supported;] [FDD – E-DCH TTI2ms 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 – SixteenQAM UL not Supported;]

HS-DSCH MAC-d PDU Size Format not supported; [FDD – F-DPCH Slot Format operation not supported;] E-DCH MAC-d PDU Size Format not available; [FDD – E-DPCCH Power Boosting not supported;] [FDD - SixtyfourQAM DL and MIMO Combined not available;] [FDD – Multi Cell operation not available;] [FDD – Multi Cell operation not supported;] [FDD - SixtyfourQAM DL and MIMO Combined not supported;] [1.28Mcps TDD- MIMO not supported;] [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 – Single Stream MIMO not supported;] [FDD – Single Stream MIMO not available;] [FDD – Multi Cell operation with MIMO not available;] [FDD – Multi Cell operation with MIMO not supported;] [FDD – Multi Cell E-DCH Operation not supported;] [FDD – Multi Cell E-DCH Operation not available;] [FDD – Multi Cell operation with Single Stream MIMO not available;] [FDD – Multi Cell operation with Single Stream MIMO not supported;] [FDD – Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available;] [FDD – Cell Specific Tx Diversity Handling For Multi Cell Operation Not Supported;] [FDD – Uplink Closed Loop Transmit Diversity Operation Not Available;] [FDD – Uplink Closed Loop Transmit Diversity Operation Not Supported;] [FDD – MIMO with four transmit antennas not supported;] [FDD – MIMO with four transmit antennas not available;] [FDD – Dual Stream MIMO with four transmit antennas not supported;] [FDD – Dual Stream MIMO with four transmit antennas not available;] [FDD – SixtyfourQAM UL not Available;] [FDD - SixtyfourQAM UL not Supported;] [FDD – UL MIMO Operation Not Available;] [FDD – UL MIMO Operation Not Supported;] [FDD – UL MIMO and SixteenQAM Operation Not Available;] [FDD – UL MIMO and SixteenQAM Operation Not Supported;] [FDD – UL MIMO and SixtyfourQAM Operation Not Available;] [FDD – UL MIMO and SixtyfourQAM Operation Not Supported;] [FDD – Multiflow Operation Not Available;]

[FDD – Multiflow Operation Not Supported.]

#### **Miscellaneous Causes:**

Control Processing Overload; Not enough User Plane Processing Resources.

# 8.3.4.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC.

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 DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure and the DRNC 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 DRNC 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 DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having

failed and the DRNC 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 UE Context set to "Common" in the existing RL(s) but the RADIO LINK RECONFIGURATION PREPARE message includes more than one *DL Reference Power* IE, the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the DRNC 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 DRNC shall reject the Synchronised Radio Link Reconfiguration Preparation procedure and the DRNC shall respond with a 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 DRNC 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 DRNS, the DRNC 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 DRNC 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 DRNC 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 UE Context, the DRNC 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE 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 MACd PDU Size Extended, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *F-DPCH Information* IE and the *DL DPCH Information* IE, then the DRNS 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 UE Context, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the concerned UE Context is configured to use DPCH in the downlink in the old configuration and if the RADIO LINK RECONFIGURATION PREPARE message includes the *DL DPCH Power Information* IE, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE 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 DRNS 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 DRNS 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 UE Context is not configured for E-DCH, then the DRNC 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 DRNC 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 DRNC 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 DRNC 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 DRNC 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 UE Context is not configured for E-DCH, the DRNC 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 DRNC 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 UE Context, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[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 DRNC 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 DRNC 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 DRNC 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 DRNC, the DRNC 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 DRNC, the DRNC 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 is not configured in the DRNC, the DRNC 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 DRNC had ignored the configuration of Transport Format Set for uplink, the DRNC 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 DRNC had ignored the configuration of Transport Format Set for downlink, the DRNC 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 or an E-DCH MAC-d flow 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 or does not contain the corresponding *E-DCH MAC-d Flow ID* IE in *E-DCH MAC-d Flows Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply UL DPCCH Slot Format 4 but is not configured to use F-DPCH, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply UL DPCCH Slot Format 0 or 2 and execute Continuous Packet Connectivity DTX-DRX operation, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply the "Closed loop mode 1" and if the concerned UE Context is not configured to apply UL DPCCH Slot Format 2 or 3, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply MIMO, allowed to apply 64QAM, establish the secondary serving HS-DSCH Radio Link, apply MIMO with four transmit antennas, or apply Dual Stream MIMO with four transmit antennas, or apply Single Stream MIMO in the new configuration but is not configured to use flexible MAC-d PDU Size, then the DRNC 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 DRNC 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 an E-DCH MAC-d flow in the *RL Specific E-DCH Information* IE but does not include the *E-DCH MAC-d flow ID* IE for the E-DCH MAC-d flow in the *E-DCH MAC-d flows Information* IE, the DRNC 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 UE Context is not

previously configured to use F-DPCH, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE 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 for the Serving E-DCH Radio Link in DRNS, the DRNC 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 or an E-DCH MAC-d Flow for a specific RL and the specific RL is combined with existing RL which the transport bearer is established for the DCH or the E-DCH MAC-d Flow in the DRNS, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the *Additional HS Cell Information RL Reconf Prep* IE indicating a new secondary serving cell that is not in the same Node B as the serving HS-DSCH cell (or new serving in case of simultaneous serving HS-DSCH cell change), then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If ALCAP is not used, if the concerned UE 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[TDD – If ALCAP is not used, if the concerned UE 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 DRNC 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains more than one of a *MIMO Activation Indicator* IE, a *MIMO with four transmit antennas Activation Indicator* IE, a *Dual Stream MIMO with four transmit antennas Activation Indicator* IE in the *HS-DSCH FDD Information* IE or in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Reconf Prep* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply more than one of MIMO, MIMO with four transmit antennas, Dual Stream MIMO with four transmit antennas and Single Stream MIMO for the HS-DSCH Radio Link or the Secondary Serving Radio link, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the *Additional E-DCH Cell Information RL Reconf Prep* IE and if the *E-DPCH Information* IE is not present or the E-DPCH Information was not configured in the UE Context, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the Additional E-DCH Cell Information RL Reconf Prep 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 DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE in the Additional E-DCH Cell Information RL Reconf Prep IE and the C-ID IE is not included but the RL indicated by the E-DCH Additional RL ID IE is not configured in the current UE context as a Secondary Serving HS-DSCH radio link without any configured Additional E-DCH, the DRNS 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 UE Context, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the secondary serving HS-DSCH is not configured in the UE 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 DRNS 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 DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *Additional HS Cell Information RL Reconf Prep* IE and the new configuration contains more than one secondary serving HS-DSCH RL, and all secondary serving HS-DSCH RLs in the new configuration will not be assigned consecutive ordinal numbers starting with the value "1", which are previously assigned to the RL or received in the *Ordinal Number Of Frequency* IE in the *HS-DSCH FDD Secondary Serving Information* To Modify IE, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *Additional HS Cell Information RL Reconf Prep* IE and the new configuration contains more than one secondary serving HS-DSCH RL, the new configuration also contains an Additional E-DCH Serving Radio Link and the secondary serving HS-DSCH Radio link, which is configured in the same cell as the Additional E-DCH Serving Radio Link does not have Ordinal Number Of Frequency value "1", the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *UL MIMO Information* IE but does not contain the *UL CLTD Information* IE, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains more than one of a *MIMO Activation Indicator* IE, a *MIMO with four transmit antennas Activation Indicator* IE, a *Dual Stream MIMO with four transmit antennas Activation Indicator* IE in *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

# 8.3.5 Synchronised Radio Link Reconfiguration Commit

# 8.3.5.1 General

This procedure is used to order the DRNS to switch to the new configuration for the Radio Link(s) within the DRNS, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

# 8.3.5.2 Successful Operation



# Figure 12: Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation

The DRNS shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure at the "configuration switching point" occurring:

- [TDD at the next coming CFN with a value equal to the value requested by the SRNC in the CFN IE (see TS 25.402 [17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the SRNC.]
- [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 SRNC in the *CFN* IE (see TS 25.402 [17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the SRNC.]
- [FDD if the *Fast Reconfiguration* IE is included in the RADIO LINK RECONFIGURATION COMMIT message as soon as the DRNS detects that the UE uses the new configuration in the uplink (e.g. the NodeB indicates 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 DRNS 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 DRNS.]

[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 DRNS 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) indicated CFN.

The detailed frame protocol handling during transport bearer replacement is described in TS 25.427 [4], subclause 5.10.1, and in TS 25.425 [32], subclauses 5.3.1 and 5.3.2.

[FDD – If the RADIO LINK RECONFIGURATION COMMIT includes the *Active Pattern Sequence Information* IE, the DRNS 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 UE Context is configured to use F-DPCH in the downlink, the DRNS shall ignore, when activating the Transmission Gap Pattern Sequence(s), the downlink compressed mode method information, if existing, for the concerned Transmission Gap Pattern Sequence(s) in the Compressed Mode Configuration.]

[FDD - If the RADIO LINK RECONFIGURATION COMMIT message includes the *Affected HS-DSCH serving cell List* IE in the *Active Pattern Sequence Information* IE, the concerned Transmission Gap Pattern Sequence shall be applied to HS-DSCH serving cells associated with *C-ID* IE included in *Affected HS-DSCH serving cell List* IE. Otherwise the concerned Transmission Gap Pattern Sequence shall be applied to all the configured serving cells.]

# 8.3.5.3 Abnormal Conditions

If a new transport bearer is required for the new configuration and it is not available at the requested configuration switching point (defined in sub-clause 8.3.3.2), the DRNS shall initiate the Radio Link Failure procedure.

[FDD – If the *Fast Reconfiguration* IE is included in the RADIO LINK RECONFIGURATION COMMIT message and the DRNC did not include the *Fast ReconfigurationPermission* IE in the RADIO LINK RECONFIGURATION READY message, the DRNC shall initiate the Radio Link Failure procedure.]

[FDD - If the RADIO LINK RECONFIGURATION COMMIT message contains the *Affected HS-DSCH serving cell List* IE in the *Active Pattern Sequence Information* IE and the Transmission Gap Pattern Sequence for affected HS-

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DSCH Serving Cells is activated on the HS-DSCH Primary Serving Cell but not for all the other serving cells, the DRNS shall initiate the Radio Link Failure procedure with the cause value "Invalid CM Settings".]

# 8.3.6 Synchronised Radio Link Reconfiguration Cancellation

### 8.3.6.1 General

This procedure is used to order the DRNS to release the new configuration for the Radio Link(s) within the DRNS, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

# 8.3.6.2 Successful Operation



#### Figure 13: Synchronised Radio Link Reconfiguration Cancellation procedure, Successful Operation

Upon receipt of the RADIO LINK RECONFIGURATION CANCEL message from the SRNC, the DRNS shall release the new configuration ([FDD – including the new Transmission Gap Pattern Sequence parameters (if existing)]) previously prepared by the Synchronised RL 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.

# 8.3.6.3 Abnormal Conditions

# 8.3.7 Unsynchronised Radio Link Reconfiguration

# 8.3.7.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a DRNS.

The procedure is used when there is no need to synchronise the time of the switching from the old to the new radio link configuration in the cells used by the UE-UTRAN connection within the DRNS.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

# 8.3.7.2 Successful Operation



# Figure 14: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the DRNC.

Upon receipt, the DRNS 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.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request the time corresponding to the value of the *Allowed Queuing Time* IE before starting to execute the request.

The DRNS shall prioritise resource allocation for the RL to be modified according to Annex A.

If the *UE Aggregate Maximum Bit Rate* IE is contained in the RADIO LINK RECONFIGURATION REQUEST message, the DRNS shall, if supported, store the received UE Aggregate Maximum Bit Rate parameters to control the aggregate data rate of non GBR traffic for this UE.

#### **DCH Modification:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Modify* IEs, then the DRNS shall treat them as follows:

- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs, then the DRNS shall treat the DCHs as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS 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 to be modified, the DRNS 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 to be modified, the DRNS shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes a *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes a *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Frame Handling Priority* IE, the DRNS 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 DRNS once the new configuration has been activated.
- If the *DCH Specific Info* IE includes the *Traffic Class* IE, the DRNC may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this DCH indicates the value "RRC".
- [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 DRNS 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 DRNS 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 *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the DRNS may use this information to determine the transport bearer characteristics to apply for the uplink for the related DCH or set of co-ordinated DCHs.

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- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- [TDD If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *CCTrCH ID* IE for the UL, the DRNS shall map the DCH onto the referenced UL CCTrCH in the new configuration.]
- [TDD If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *CCTrCH ID* IE for the DL, the DRNS shall map the DCH onto the referenced DL CCTrCH in the new configuration.]
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user in the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.

## **DCH Addition:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Add* IEs, then the DRNS shall treat them each as follows:

- The DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.
- If the *DCHs To Add* IE includes multiple *DCH Specific Info* IEs then the DRNS shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if all of them can be in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the DRNS 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 DRNS 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 each DCH which does not belong to a set of co-ordinated DCHs, and which includes a *QE-Selector* IE set to "selected", the DRNS shall use the Transport channel BER from that DCH for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. If the *QE-Selector* IE is set to "non-selected", the DRNS shall use the Physical channel BER for the QE in the UL data frames, TS 25.427 [4].
- For a set of co-ordinated DCHs, the DRNS shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" for the QE in the UL data frames, TS 25.427 [4]. [FDD If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. If all DCHs have the *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4].] [TDD If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, TS 25.427 [4].]
- The DRNS 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 DRNS once the new configuration has been activated.

- The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE indicates the value "RRC".
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the DRNS may use this information to determine the transport bearer characteristics to apply for the uplink for the related DCH or set of co-ordinated DCHs.
- The DRNS 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 DRNS 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 DRNS 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.
- If the *DCH Specific Info* IE includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCH Information* IE does not include the *Guaranteed UL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCH Information* IE does not include the *Guaranteed DL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.

# **DCH Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Delete* IEs, the DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS shall apply the parameters to the new configuration as follows:]

- [FDD – If the *DL DPCH Information* IE includes the *TFCS* IE for the DL, the DRNS shall apply the new TFCS in the Downlink of the new configuration.]

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- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE for the DL, the DRNS shall apply the new TFCI Signalling Mode in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to "Used", the DRNS shall, if supported, use Limited Power Increase according to TS 25.214 [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 and the IE is set to "Not Used", the DRNS 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 DRNS 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 DRNS until the next Compressed Mode Configuration is configured in the DRNS or last Radio Link is deleted.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern* Sequence Information IE, and if the Downlink Compressed Mode Method in one or more Transmission Gap Pattern Sequence within the *Transmission Gap Pattern Sequence Information* IE is set to "SF/2", the DRNC shall include the DL Code Information IE in the RADIO LINK RECONFIGURATION RESPONSE message, without changing any of the DL Channelisation Codes or DL Scrambling Codes, indicating for each DL Channelisation Code whether the alternative scrambling code shall be used or not.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DPCH Information* IE which contains the *E-TFCS Information* IE, the DRNS shall use the *E-TFCS Information* IE for the E-DCH when reserving resources for the uplink of the new configuration. The DRNS 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 Validity Indicator* IE the DRNS shall ignore the value in *E-DCH Minimum Set E-TFCI* IE. If the *E-DCH Minimum Set E-TFCI Validity indicator* IE is absent DRNS 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 DRNS shall use the value to determine the applicable E-DPDCH power formula defined in TS 25.214 [10]. If the *E-DPDCH Power Interpolation* IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in TS 25.214 [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION REQUEST message.]

FDD – If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the DRNS shall use the information according to TS 25.214 [10]. If the *E-TFCI Boost Information* IE is not present, the DRNS shall use the value "127" in the algorithm defined in TS 25.214 [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION REQUEST message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *E-DPCCH Power Offset* IE, the DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in TS 25.214 [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the UE Context, the DRNS may use the default value defined in TS 25.331 [16].

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

- [FDD – The DRNS shall configure the concerned UE Context for Continuous Packet Connectiviy DTX operation according to TS 25.214 [10].]

- [FDD – If *DRX Information* IE is included in the *Continuous Packet Connectivity DTX-DRX Information* IE, then the DRNS shall configure the concerned UE Context for Continuous Packet Connectivity DRX operation according to TS 25.214 [10].]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* [E, then:]

- [FDD If the UE DTX DRX Offset IE is included in the Continuous Packet Connectivity DTX-DRX Information To Modify IE, then the DRNS 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 DRNS shall use this value to determine the beginning of uplink transmission in the new configuration according to TS 25.214 [10] .]
- [FDD If the *DTX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the DRNS 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 DRNS 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 DRNS shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for Continuous Packet Connectiviy HS-SCCH less operation according to TS 25.214 [10].]
- [FDD The DRNS 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 DRNC 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 DRNS shall deactive the Continuous Packet Connectivity HS-SCCH less operation for the HS-DSCH Radio Link.]

# [FDD - UL CLTD Setup:]

[FDD - If the *UL CLTD Information Reconf* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Setup, Configuration Change or Removal of UL CLTD* is "Setup", then: the DRNS shall setup the requested UL CLTD resources for the concerned UE Context in the cell to determine the precoding weights according the new configuration defined in the *UL CLTD Information* IE and then:]

- [FDD If there is neither serving E-DCH RL nor the HS-DSCH RL configuration in the UE Context, the *C-ID* IE shall be included in the *UL CLTD Information* IE, and the DRNS shall configure this cell to determine the precoding weights for the concerned UE Context.]
- [FDD If the *UL CLTD Activation Information* IE is included in the *UL CLTD Information* IE, then the DRNS shall use this value to configure the state of UL CLTD for the concerned UE Context.]

# [FDD - UL CLTD Modification:]

[FDD - If the UL CLTD Information Reconf IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of Setup, Configuration Change or Removal of UL CLTD is "Configuration Change", then: the UL CLTD Information To Modify IE defines the new configuration and then:]

- [FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *C-ID* IE in the *UL CLTD Information To Modify* IE, then the DRNS shall configure this cell to determine the precoding weights for the concerned UE Context. Otherwise the DRNS shall configure the serving E-DCH cell or the HS\_DSCH serving

cell to determine the precoding weights as specified in TS 25.319[38]. The UL CLTD configuration is only valid for the cell to determine the precoding weights.]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the S-DPCCH Power Offset Information IE in the UL CLTD Information To Modify IE, then the DRNS shall use this value to determine the S-DPCCH power.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the UL CLTD State Activation Information IE in the UL CLTD Information To Modify IE, then the DRNS shall use this value to update the local state of UL CLTD for the concerned UE Context. If the UL CLTD Activation Information IE is set to "De-activated", the DRNS should release the F-TPICH resource configured for the concerned UE Context.]

# [FDD - UL CLTD Removal:]

[FDD - If the *UL CLTD Information Reconf* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Setup, Configuration Change or Removal of UL CLTD* is "Removal", then the configured UL CLTD for the concerned UE Context shall be removed.]

# [FDD – UL MIMO Setup:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL MIMO Information* IE in *E-DCH FDD Information*, or the *UL MIMO Reconfiguration* IE and the choice of *Setup* or *Change* or *Stop* is "Setup", then the DRNS shall setup the requested UL MIMO operation.]

# [FDD – UL MIMO Modification:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes *UL MIMO Reconfiguration* IE and the choice of *Setup* or *Change* or *Stop* is "Change", then the DRNS shall apply the new configuration.]

# [FDD – UL MIMO Removal:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the UL MIMO Reconfiguration IE and the choice of Setup or Change or Stop is "Stop", then the DRNS shall terminate the UL MIMO operation.]

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS shall take account into these parameters to decide the DRX operation related parameters and configure the concerned UE Context for DRX operation according to TS 25.224 [22] 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 *Inactivity Threshold for UE DRX Cycle Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS may use this value to determine the Inactivity Threshold for UE DRX Cycle according to TS 25.224 [22].]

[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 DRNS 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 DRNS shall use this value to determine the beginning of uplink transmission in the new configuration according to TS 25.224 [22].]
- [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 DRNS shall use this information to modify the indicated DRX Information in the new configuration.]

[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 DRNS 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 TS 25.224 [22].]

- [1.28 Mcps TDD The DRNS 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 LCR IE, then the DRNS 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 DRNS 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 TS 25.224 [22].]
- [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 DRNS shall include *Allocated 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 DRNS 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 TS 25.224 [22].
- [1.28 Mcps TDD The DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 RQUEST 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 DRNS shall modify the configuration of Serving HS-DSCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to TS 25.224 [22].]
- [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 DRNS shall apply this information for E-DCH Semi-Persistent scheduling operation.]
- [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 DRNS shall include *Allocated 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 DRNS 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 DRNS shall deactivate the E-DCH Semi-Persistent scheduling operation for the E-DCH Radio Link.]

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *MU-MIMO Indicator* IE, then:]

- [1.28 Mcps TDD –the DRNS may use the MU-MIMO for the radio link according to the *MU-MIMO Usage Indicator* IE and shall include the *MU-MIMO Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28 Mcps TDD If the *Standalone Midamble Channel Indicator* IE is set to "Used", then the DRNS shall include Standalone Midamble Channel information in the RADIO LINK RECONFIGURATION RESPONSE message. Else, the DRNS shall not include Standalone Midamble Channel information in the RADIO LINK RECONFIGURATION RESPONSE message.]

# [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, the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH Information To Modify* IEs or *DL CCTrCH Information To Modify* IEs which contain a *TFCS* IE, the DRNS shall apply the included *TFCS* IE as the new value(s) to the referenced CCTrCH. Otherwise the DRNS shall continue to apply the previous value(s) specified for this CCTrCH.]

[1.28Mcps TDD – If the *UL CCTrCH To Modify* IE includes *UL SIR Target* IE, the DRNS shall apply this value as the new configuration and use it for the UL inner loop power control according to TS 25.221 [12] and TS 25.224 [22].]

# [TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH Information To Delete* IEs or *DL CCTrCH Information To Delete* IEs, the DRNS shall not include the referenced CCTrCH in the new configuration.]

# **DL Power Control:**

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *DL Reference Power Information* IE and the power balancing is active, the DRNS 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 Information* 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 DRNS, the DRNC 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.]

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

[1.28Mcps TDD – If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC 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 – Shared physical channels Synchronisation Detection:]

[1.28Mcps TDD – If HS-PDSCH and E-PUCH are configured but no DPCH is configured for the UE, then the DRNS shall include the *Out-of-sync Detection Window* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

# [1.28Mcps TDD – Uplink Timing Advance Control LCR:]

[1.28Mcps TDD – The DRNC shall include the *Uplink Timing Advance Control LCR* IE in the RADIO LINK RECONFIGURATION RESPONSE message, if the Uplink Timing Advance Control parameters have been changed.]

# [1.28Mcps TDD – PowerControl GAP:]

[1.28Mcps TDD – If applied in the DRNS, the DRNC may include the *PowerControl GAP* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

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

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Need for Idle Interval* IE set to "TRUE", if supported, the DRNC shall include the *Idle Interval Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the *Need for Idle Interval* IE is set to "FALSE", the DRNC shall delete the configuration related to E-UTRAN Inter-RAT measurement.]

## [1.28Mcps TDD – Inter-frequency/ Inter-RAT measurement:]

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *DCH Measurement Type indicator* IE, if supported, the DRNS shall include the *Measurement purpose* IE and the *Measurement occasion pattern sequence parameters* IE in the *DCH Measurement Occasion Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message to configure the measurement occasion pattern(s) indicated by the *DCH Measurement Type indicator* IE.]

# [1.28Mcps TDD – RNTI Allocation Indicator:]

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *RNTI Allocation Indicator* IE, if supported, the DRNS may allocate an E-RNTI and/or an H-RNTI for UE to use in CELL\_FACH state.]

## **RL Information:**

[FDD – If the UE Context is configured for F-DPCH Slot Format operation, the DRNS shall include the *F-DPCH Slot Format* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[FDD – If the *RL Information* IE includes the *F-TPICH Information Reconf* IE and the choice of *Setup, Configuration Change or Removal of F-TPICH Information* is "Setup", then the DRNS shall use the information in *F-TPICH Information* IE to configure the F-TPICH of the RL according to TS 25.211 [7] and TS 25.214 [10], and shall include the *F-TPICH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[FDD – If the *RL Information* IE includes the *F-TPICH Information Reconf* IE and the choice of *Setup, Configuration Change or Removal of F-TPICH Information* is "Configuration Change", then: the *F-TPICH Information To Modify* IE defines the new configuration and then:]

- [FDD – If the *F-TPICH Information To Modify* IE includes the *F-TPICH Offset* IE, the DRNS shall use this information to configure the time offset of F-TPICH, and may include the *F-TPICH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[FDD – If the *RL Information* IE includes the *F*-*TPICH Information Reconf* IE and the choice of *Setup*, *Configuration Change or Removal of F*-*TPICH Information* is "Removal", then the DRNS shall remove the configured F-TPICH for the RL.]

# **HS-DSCH Setup:**

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

- The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The DRNC 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 or MIMO With four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH Information IE.]
- The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

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- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* 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 DRNS 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 DRNS 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 DRNS 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 DRNC 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 DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. 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 DRNC 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 I 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 DRNS 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 DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall 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 DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall 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 The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD* 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 DRNS shall use the indicated HARQ Preamble Mode as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC 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 DRNC shall not include the HARQ Preamble Mode Activation Indicator IE in the HS-DSCH Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- 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 DRNS shall use the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *MIMO Activation Indicator* IE or *MIMO with four transmit antennas Activation Indicator* IE, or *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then]
  - [FDD The DRNS shall activate the MIMO mode or MIMO with four transmit antennas mode or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link.]
  - [FDD The DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas, or Dual Stream MIMO with four transmit antennas and include the *MIMO Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD If the Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
  - [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is
    included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up
    with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the
    Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Information
    Response IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the
    DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]
- [1.28 Mcps TDD If the MIMO Activation Indicator IE is included in the HS-DSCH TDD Information IE, then:]
  - [1.28 Mcps TDD The DRNS shall activate the MIMO mode for the HS-DSCH Radio Link.]
  - [1.28 Mcps TDD The DRNS 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 Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS 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 DRNS 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 DRNS shall include the HS-DSCH TB Size Table Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] 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 DRNS 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 DRNS may use the supported HSDPA functions for this UE.]

- [FDD If the UE Support Indicator Extension IE is included in the HS-DSCH FDD Information IE with the bit UE DTXDRX related HS-SCCH orders uniform behavior indicator set to 0, then the DRNS shall, if supported, include the Support of dynamic DTXDRX related HS-SCCH order IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [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.]
- 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 DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *Priority Queue Information* IE in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the DRNS shall, if supported, consider the data of the related HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]
- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS shall activate the Single Stream MIMO for the HS-DSCH Radio Link.]
- [1.28 Mcps TDD If the UE TSO Capability LCR IE is included in the HS-DSCH TDD Information IE, then the DRNC may include the TSO HS-PDSCH Indication LCR IE in the RADIO LINK RECONFIGURATION RESPONSE message if HS-PDSCH resources could be allocated on TSO for the UE.]

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

[FDD – If the *C-ID* IE is present in the RADIO LINK RECONFIGURATION REQUEST message, no secondary serving HS-DSCH Radio Link(s) has been configured in the DRNS or if the new configuration contains more than one secondary serving HS-DSCH Radio Link, then if the *Ordinal Number Of Frequency* IEs, in the *HS-DSCH FDD Secondary Serving Information* IE or in the *HS-DSCH FDD Secondary Serving Information To ModifyUnsynchronised* IE for each instance of the *Additional HS Cell Information RL Reconf Req* IE, indicate that new secondary serving HS-DSCH Radio Link(s) shall be setup, then:]

- [FDD The DRNS 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 secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the HS-DSCH-RNTI IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [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 DRNS 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 DRNS shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and the DRNC shall 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 The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* 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 The DRNC shall include the *Measurement Power Offset* 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 MIMO Activation Indicator IE or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the MIMO mode or MIMO with four transmit antennas mode or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH

Radio Link and the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas, or Dual Stream MIMO with four transmit antennas and include the *MIMO 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 Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Secondary Serving Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
- [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Secondary Serving Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]
- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS 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* IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH, the DRNS 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 TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]

## Intra-DRNS 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 DRNS 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.
- If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* IE.
- The DRNC 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.]
- The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

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- If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall 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 DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68 Mcps TDD HS-SCCH Specific Information Response 7.68 Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The DRNC shall include the [3.84 Mcps TDD HS-PDSCH Timeslot Specific Information IE] [1.28 Mcps TDD HS-PDSCH Timeslot Specific Information LCR IE] [7.68 Mcps TDD HS-PDSCH Timeslot Specific Information 7.68 Mcps IE]in the HS-DSCH Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD* Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the [FDD HS-DSCH FDD Information Response IE] [TDD HS-DSCH TDD Information Response IE] in the RADIO LINK RECONFIGURATION RESPONSE 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE and the value is set to "allowed" or if *HS-DSCH Information To Modify Unsynchronized* IE is not included and the UE 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 DRNS 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 If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the DRNS shall
  include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Information Response* IE in the RADIO
  LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in TS
  25.321 [41] for HS-DSCH Transport Block Size signalling.]
- [FDD If the power offset for S-CPICH for MIMO Request indicator and MIMO activation indicator have been configured in the new configuration and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the power offset for S-CPICH for MIMO with four transmit antennas Request indicator and MIMO with four transmit antennas activation indicator, or Dual Stream MIMO with four transmit antennas Activation Indicator have been configured in the new configuration and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]

# [FDD – Intra-DRNS Secondary Serving HS-DSCH Radio Link Change:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *C-ID* IE in the *Additional HS Cell Information RL Reconf Req* IE, one or more secondary serving HS-DSCH Radio Link(s) has been configured in the

DRNS and if the new configuration contains more than one secondary serving HS-DSCH Radio Link, then if the *Ordinal Number Of Frequency* IEs, in the *HS-DSCH FDD Secondary Serving Information* IE for each instance of the *Additional HS Cell Information RL Reconf Req* IE, indicate that existing secondary serving HS-DSCH Radio Links shall be subject to intra-DRNS secondary serving HS-DSCH Radio Link change, then the *HS-PDSCH RL ID* IE indicates the new Serving HS-DSCH Radio Link:]

- [FDD The DRNS 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 DRNS shall remove the old secondary serving HS-PDSCH Radio Link if no E-DCH resources are allocated to the RL. Non cell specific secondary serving Radio Link and non cell specific secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the HS-DSCH-RNTI IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNC shall include the *Measurement Power Offset* 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 *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and the DRNC shall 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 The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* 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 and the value is set to "allowed" or if HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE is not included and the UE 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 DRNS 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 Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH, the DRNS 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 TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD If the old and/or new configuration contains more than one Secondary Serving HS-DSCH Radio Link the *HS-DSCH FDD Secondary Serving Information* IE defines the new secondary serving HS-DSCH configuration in the DRNS to be used on the new secondary serving HS-DSCH Radio Link, and then:]
  - [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 DRNS 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 MIMO Activation Indicator IE or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link and the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas, or Dual Stream MIMO with four transmit antennas mode and include the MIMO 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 RECONFIGURATION RESPONSE message.]

- [FDD If the Single Stream MIMO Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS 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* IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If the power offset for S-CPICH for MIMO Request indicator and MIMO activation indicator have been configured in the new configuration and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the power offset for S-CPICH for MIMO with four transmit antennas Request indicator and MIMO with four transmit antennas activation indicator, or Dual Stream MIMO with four transmit antennas activation indicator have been configured in the new configuration and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]

### [FDD – Additional Serving E-DCH Radio Link Change to an existing additional non serving E-DCH RL:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *C-ID* IE in the *Additional HS Cell Information RL Reconf Req* IE and an additional non serving E-DCH RL exists in the cell indicated by the *C-ID* IE, the *HS-PDSCH RL ID* IE in the *HS Cell Information RL Reconf Req* IE indicates the new Additional Serving E-DCH Radio Link.]

- [FDD If the old Additional Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Additional Serving E-DCH Radio Link at the activation of the new configuration.]
- [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Additional 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 *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNS may include the Serving Grant Value IE and Primary/Secondary Grant Selector IE in the E-DCH FDD DL Control Channel Information IE in the Additional Modified E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message for the initial grant for the Additional serving E-DCH RL and may include the Default Serving Grant in DTX Cycle 2 IE.]
- [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE in the Additional Modified E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNS 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 Additional Modified E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION RESPONSE message for every E-DCH Radio Link on secondary UL frequency in the DRNS. If the DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE in the E-DCH FDD DL Control Channel Information IE then it shall insert the E-RGCH and E-HICH Channelisation Code Validity Indicator IE in the E-DCH FDD DL Control Channel Information IE, to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]

## [FDD – Additional Serving E-DCH Radio Link Change to a new RL:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the Additional E-DCH RL Specific Information To Add IE in the Additional E-DCH Configuration Change Information IE in the Additional E-DCH Cell Information RL Reconf Req IE and the C-ID IE in the Additional HS Cell Information RL Reconf Req IE and there is no radio links in the cell indicated by the C-ID IE for the UE context, the HS-PDSCH RL ID IE indicates the new Additional Serving E-DCH Radio Link on secondary UL frequency.]

- [FDD If the old Additional Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Additional Serving E-DCH Radio Link at the activation of the new configuration.]
- [FDD In the new configuration the DRNS shall allocate the E-DCH resources for the new additional serving E-DCH Radio Link on the secondary UL frequency. Non cell specific E-DCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Additional 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 *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNS may include in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the additional serving E-DCH RL and may include the *Default Serving Grant in DTX Cycle 2* IE.]
- [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

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

If the RADIO LINK RECONFIGURATION REQUEST message includes the HS-DSCH Information To Modify Unsynchronised IE, then:

- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE for each HS-DSCH MAC-d flow being modified for which the establishment of one or several new Priority Queues was requested, if the DRNS allows the SRNC to start the transmission of MAC-d PDUs for the Priority Queue(s) being established before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If UE context is configured to use "Flexible MAC-d PDU Size", then DRNC 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 UE context.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Traffic Class* IE in the *HS-DSCH Information To Modify Unsynchronised* IE for a specific HS-DSCH MAC-d flow, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this specific HS-DSCH MAC-d flow indicates the value "RRC".
- 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the DRNS 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 Modify Unsynchronised* IE, then the DRNS 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 Modify Unsynchronised IE, then the DRNS 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 Modify Unsynchronised* IE, the DRNS 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 Modify Unsynchronised* IE, the DRNS shall use the indicated power offset in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the HARQ Preamble Mode IE in the HS-DSCH Information To ModifyUnsynchronised IE, then the DRNS shall use the indicated HARQ Preamble Mode in the new configuration as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC 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 DRNC shall not include the HARQ Preamble Mode Activation Indicator IE in the RS-DSCH Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE, then:]
  - [FDD The DRNS shall activate/deactivate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link in the new configuration in accordance with the *MIMO Mode Indicator* IE or *MIMO with four transmit antennas Mode Indicator* IE, or *Dual Stream MIMO with four transmit antennas Mode Indicator* IE.]
  - [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate", then the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO and include the MIMO Information Response IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD If the MIMO Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Information Response IE. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
  - [FDD If the *MIMO with four transmit antennas Mode Indicator* IE or *Dual Stream MIMO with four transmit antennas Mode Indicator* IE is set to "Activate" and *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Information Response* IE. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]
- [FDD The DRNC 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 Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS 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 DRNS 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 DRNS shall
  include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Information Response* IE in the RADIO
  LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in TS
  25.321 [41] for HS-DSCH Transport Block Size signalling.]
- [1.28Mcps TDD- If the *MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE, then:]
  - [1.28Mcps TDD- The DRNS shall activate/deactivate the MIMO mode for the HS-DSCH Radio Link in the new configuration in accordance with the *MIMO Mode Indicator* IE.]
  - [1.28 Mcps TDD If the *MIMO Mode Indicator* IE is set to "Activate", then the DRNS 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 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.]
- [FDD If the UE Support Indicator Extension IE is included in the HS-DSCH Information To Modify Unsynchronised IE the DRNS may use the supported HSDPA functions for this UE.]
- [FDD If the UE Support Indicator Extension IE is included in the HS-DSCH Information To Modify IE with the bit UE DTXDRX related HS-SCCH orders uniform behavior indicator set to 0, then the DRNS shall, if supported, include the Support of dynamic DTXDRX related HS-SCCH order IE in the HS-DSCH FDD Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *Single Stream MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE, then the DRNS shall activate/deactivate the Single Stream MIMO for the HS-DSCH Radio Link in accordance with the *Single Stream MIMO Mode Indicator* IE.]

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

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE in the Additional HS Cell Information RL Reconf Req IE, then:]

- [FDD If the HS-SCCH Power Offset IE is included in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE, the DRNS 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 MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE or Dual Stream MIMO with four transmit antennas Mode Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE, then the DRNS shall activate/deactivate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link in accordance with the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE.]
- [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate", then the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas, or Dual Stream MIMO with four transmit antennas and include the MIMO 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 *MIMO Mode Indicator* IE is set to "Activate" and *Power Offset For S-CPICH for MIMO Request Indicator* IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the *MIMO with four transmit antennas Mode Indicator* IE is set to "Activate" or *Dual Stream MIMO with four transmit antennas Mode Indicator* IE is set to "Activate" and *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]
- [FDD If the *Single Stream MIMO Mode Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised* IE, then the Node B shall activate/deactivate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link in accordance with the *Single Stream MIMO Mode Indicator* IE.]
- [FDD If the Ordinal Number Of Frequency IE is included in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [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 DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS 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 DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the UE context is configured to use the "Flexible MAC-d PDU Size" format and if Sixtyfour QAM will not be used for the secondaery serving HS-DSCH, then the DRNS 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 TS 25.321 [41] for secondary serving 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, then the DRNS 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 UE Context, then the DRNC shall delete the HS-DSCH configuration from the UE Context and release the HS-PDSCH resources.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d Flows To Add* IE, then:

- The DRNS may use the Traffic Class IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If TrCH Source Statistics Descriptor IE is present with the

value "RRC" in the HS-DSCH MAC-d Flows Information IE, then the DRNC should ignore the Traffic Class 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 DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- The DRNC 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 DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If the UE context is configured to use the "Flexible MAC-d PDU Size" format for the HS-DSCH, then DRNC 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 I 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 DRNS 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 Maximum MAC-d PDU Size Extended IE for a Priority Queue in the HS-DSCH MAC-d Flows To Add IE, then the DRNC 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 REQUEST message includes DL RLC PDU Size Format IE for a Priority Queue in the HS-DSCH MAC-d Flows To Add IE, the DL RLC PDU Size Format IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, the DRNS shall, if supported, consider the data of the related HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]

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 DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.

# [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 DRNS shall, if supported, preconfigure the indicated cells for Enhanced HS Serving Cell Change according to TS 25.308 [63]:]

- [FDD The DRNS 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 *Secondary C-ID* IEsin 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 TS 25.214 [10].

- [FDD The DRNS shall return these codes in the *Sets of HS-SCCH Codes* IE along with the corresponding percell *HS-DSCH-RNTI* IE in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE of the RADIO LINK RECONFIGURATION RESPONSE.]
- [FDD The DRNS shall use the first in the numbered list the primary serving HS-DSCH cell's of HS-SCCH codes in the HS-SCCH Preconfigured Codes IE sent to the SRNC to signal the Target Cell HS-SCCH Order defined in TS 25.331 [16].]
- [FDD The DRNS 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 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 *MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE.]
  - [FDD if *Dual Stream MIMO with four transmit antennas 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 preconfiguration 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 DRNS shall store this information in the preconfigured configuration.]
  - [FDD the SixtyfourQAM DL Support Indicator IE may be included.]
  - [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS may store this information in the preconfigured configuration.]
  - [FDD If the UE Support Indicator Extension IE is included in the HS-DSCH Preconfiguration Setup IE with the bit UE DTXDRX related HS-SCCH orders uniform behavior indicator set to 0, then the DRNS shall, if supported, include the Support of dynamic DTXDRX related HS-SCCH order IE in the Preconfiguration Info IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD the DRNS shall, if supported, include in the Sets of HS-SCCH Codes IE the Measurement Power Offset IE for each preconfigured cell.]
- [FDD The DRNS 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 DRNS 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 DRNS may preconfigure 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 Power Offset For S-CPICH for MIMO Request 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 DRNC
shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up on the cell with a
non-zero power offset where HS-DSCH / secondary HS-DSCH is preconfigured, include the Power Offset For
S-CPICH for MIMO IE in the HS-DSCH Preconfiguration Info IE or in the Sets of HS-SCCH Codes IE in the
HS-DSCH Preconfiguration Info IE for each preconfigured cell in the RADIO LINK RECONFIGURATION
RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO
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 DRNS", the DRNC 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 RECONFIGURATION RESPONSE message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL Not in the DRNS", the DRNC 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 DRNS or New Serving RL Not in the DRNS", the DRNC 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 if the Additional E-DCH Non-Serving RL Preconfiguration Setup IE is included, the DRNC 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 according to the choice of new Serving RL in Additional E-DCH New non-serving RL E-DCH FDD DL Control Channel Information IE for the additional non serving E-DCH 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 DRNS for the UE context, the DRNS may execute the Enhanced HS Serving Cell Change procedure according to TS 25.308 [63].]

[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 DRNS shall not execute the unsynchronized Enhanced HS Serving Cell Change procedure when performing the Serving HS-DSCH Radio Link Change or the HS-DSCH Setup.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *No of Target Cell HS-SCCH Order* IE then the DRNS 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 DRNC shall remove the corresponding preconfigured E-DCH DL Control Channel Information according to the information.]

### [FDD - Multiflow Setup:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Multiflow Information* IE in *HS*-DSCH Information IE, or *Multiflow Reconfiguration* IE in *HS*-DSCH Information To Modify IE and the choice of Setup or Change or Stop is "Setup", then the DRNS shall setup the requested Multiflow operation.]

# [FDD - Multiflow Modification:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes *Multiflow Reconfiguration* IE in *HS*-*DSCH Information To Modify* IE and the choice of *Setup or Change or Stop* is "Change", then the DRNS shall apply the new configuration.]

# [FDD - Multiflow Removal:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Multiflow Reconfiguration* IE in *HS-DSCH Information To Modify* IE, and the choice of *Setup or Change or Stop* is "Stop", then the DRNS shall terminate the Multiflow operation.]

# [FDD – E-DCH Setup:]

[FDD – If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION REQUEST message then:]

- [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 FDD Information* IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH FDD Information* IE, the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]
- [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 DRNS 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 (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [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 DRNS shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the DRNS 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 DRNS 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 DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [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 DRNS 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 *Bundling Mode Indicator* IE for a 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 DRNS shall use the bundling mode for the E-DCH UL data frames for the related Mac-d flow, otherwise the DRNS 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 DRNS 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 DRNS 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 DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH ReferencePower Offset* IE, then the DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]

# [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 DRNC shall setup the E-DCH resources, as requested or as configured in the UE context, on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The DRNC 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 DRNC 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 DRNC 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 DRNS would contain the E-DCH serving RL, the DRNS 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 SRNC 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 within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link.]
- [FDD If the new Serving E-DCH RL is within this DRNS:]
  - [FDD The DRNS 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 *RL Information Response* IE for the indicated RL in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD The DRNS 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 DRNS 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 a serving cell change is performed the RADIO LINK RECONFIGURATION RESPONSE message may contain invalid data (see 9.2.2.4C).]
  - [FDD The DRNS 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 DRNS 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 DRNS.]
- [FDD If the DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message, then it shall insert the *E-RGCH and E-HICH Channelisation Code Validity Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE, to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]

### [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 DRNS shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [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 DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If *Traffic Class* IE is included for an E-DCH MAC-d flow the DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this specific E-DCH MAC-d flow indicates the value "RRC".]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Data Description Indicator* IE, the DRNC shall use the DDI values indicated in the *Data Description Indicator* IE in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH FDD Information To Modify* IE, the DRNS shall use this information to optimise MAC-e scheduling decisions.]

- [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 in the *E-DCH FDD Information To Modify* IE, then the DRNS 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 DRNS shall use this information for calculating the unquantised gain factor for an E-TFC ( $\beta_{ed,j,uq}$ ) as defined in TS 25.214 [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 DRNS shall use this information 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 Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS 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 DRNS 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 DRNS 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 DRNS 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 DRNS shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the DRNS 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 DRNC 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 DRNS shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the DRNS 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 DRNS shall use this information for the related resource allocation operation.]
- [FDD If the E-DCH serving RL is in this DRNS, the DRNS may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission. In this case the DRNS 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 DRNS 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 DRNS 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 DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH ReferencePower Offset* IE, then the DRNS 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-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS 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 DRNS 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 DRNS 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 *E-DCH Power Offset for Scheduling Info* IE, then the DRNS 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 *SixteenQAM UL Operation Indicator* IE in the *E-DCH FDD Information To Modify* IE, the DRNS 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 DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]
- [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 DRNS 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 DRNC 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:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Add* IE, then the DRNS shall use this information to add the indicated E-DCH MAC-d flows.]

[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 DRNS 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 the *E-DCH MAC-d Flows To Add* IE, then:]

- [FDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [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 To Add IE, the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the UE Aggregate Maximum Bit Rate Enforcement Indicator IE in the E-DCH Logical Channel Information IE in the E-DCH MAC-d Flows To Add IE, the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]

# [FDD – E-DCH MAC-d Flow Deletion:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete* IEs, then the DRNS shall use this information to delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration shall also be removed.]

[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 UE Context, then the DRNC shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.]

# [FDD – Additional E-DCH Setup:]

[FDD – If the Additional E-DCH Cell Information RL Reconf Req IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency is "Setup", then the Additional E-DCH Cell Information Setup IE defines the new configuration and then:]

- [FDD If the *C-ID* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *C-ID* IE indicates the cell in which the additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the E-DCH on the secondary uplink frequency and setup the requested E-DCH resources on the Radio Links and in the cells indicated by the *E-DCH Additional RL ID* IE and the *C-ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD If the *C-ID* IE is not included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *E-DCH Additional RL ID* IE indicates the existing RL on which the additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the additional E-DCH on the Radio Links indicated by the *E-DCH Additional RL ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD The DRNS shall use for the non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the *UL SIR Target* IE in the *UL DPCH Information* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE and/or the *DL Power Balancing Information* IE and/or the *Minimum Reduced E-DPDCH Gain Factor* IE in the *Multicell E-DCH Information* IE in the *Additional E-DCH FDD Setup Information* IE are present, the DRNS shall use the information in the same same way as for the information used on Primary uplink frequency.]
- [FDD If the Secondary UL Frequency Activation State IE is present in the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE, the DRNS shall use the information as initial activation state of the Radio Links on the secondary uplink frequency.]
- [FDD If the *Initial DL Tx Power* IE, the *Primary CPICH Ec/No* IE, the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE and/or the *E-HICH Power Offset* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the *Enhanced Primary CPICH Ec/No* IE is included in the *Multicell E-DCH RL Specific Information* IE in the *Additional E-DCH Secondary RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the F-DPCH Slot Format Support Request IE in the F-DPCH Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE is included, the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211 [8] and include the F-DPCH Slot Format IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response IE in the Additional E-DCH Cell Information Response RLReconfIE in the RADIO LINK RECONFIGURATION RESPONSE message. If the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE includes

the *F-DPCH Slot Format* IE, the DRNS may use the *F-DPCH Slot Format* IE to determine the F-DPCH slot format.]

- [FDD If the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the E-DCH Maximum Bitrate IE, the E-DCH Minimum Set E-TFCI IE and/or the E-DCH Processing Overload Level IE are present in the Additional E-DCH FDD Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If activation of power balancing for the Additional E-DCH RL by the RADIO LINK RECONFIGURATION REQUEST message is supported by the DRNS, the DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message to a value that uniquely identifies the RL as a RL Set within the UE Context. The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]
- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]
- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set a same value to the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* RLReconf IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD For every additional E-DCH RL indicated in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE the DRNS 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 DRNS may include the corresponding E-RGCH Signature Sequence IE for each Additional E-DCH RL in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION RESPONSE message and if DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE, then it shall insert the E-RGCH and E-HICH Channelisation Code Validity Indicator IE to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]
- [FDD If the Additional Serving E-DCH Radio Link is configured in the DRNS, then:]
  - [FDD The DRNS 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 *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD The DRNS may include in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION RESPONSE message the Serving Grant Value IE and Primary/Secondary Grant Selector IE for the initial grant for the Additional serving E-DCH RL and may include the Default Serving Grant in DTX Cycle 2 IE.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [FDD If Primary CPICH is not to be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If Secondary CPICH may be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Secondary CPICH Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the DRNS doesn't include the *Secondary CPICH Information* IE, it shall not include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used".]

## [FDD – Additional E-DCH Configuration Change]

[FDD – If the Additional E-DCH Cell Information RL Reconf Req IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency is "Configuration Change", then the Additional E-DCH Cell Information Configuration Change IE defines the new configuration and then:]

- [FDD If the *Minimum Reduced E-DPDCH Gain Factor* IE and/or the *Common DL Reference Power* IE is present in the *Multicell E-DCH Information* IE in the *Additional E-DCH Configuration Change Information* IE IE the DRNS shall use the information in the same way as for the information that is used on the Primary uplink frequency.]
- [FDD. If the UE Context is configured for F-DPCH Slot Format operation, the DRNS shall include the *F-DPCH Slot Format* IE in the *Additional E-DCH FDD Information Response* IE for new RLs on the secondary UL frequency or in the *Additional Modified E-DCH FDD Information Response* IE for modified RLs in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### [FDD – Additional E-DCH RL Addition:]

[FDD – If the Additional E-DCH RL Specific Information To Add IE is present in the Additional E-DCH Configuration Change Information IE in the Additional E-DCH Configuration Change Information IE, then:]

- [FDD The DRNS shall setup the E-DCH resources, as requested or as configured in the UE context, on the Radio Links indicated by the *E-DCH Additional RL ID* IE. Non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the *E*-AGCH Power Offset IE, the *E*-RGCH Power Offset IE, the *E*-HICH Power Offset IE is included, the DRNS shall use the information in the same way as for the information used on the Primary uplink frequency.]
- [FDD If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Individual" in the existing Additional E-DCH RL(s) and the RADIO LINK RECONFIGURATION REQUEST message includes the *DL Reference Power* IE in the *Multicell E-DCH RL Specific Information* IE, the DRNS shall activate the power balancing and use the *DL Reference Power* IE for the power balancing procedure in the new Additional RL(s), if activation of power balancing by the RADIO LINK RECONFIGURATION REQUEST message at RL addition on secondary UL frequency is supported, according to subclause 8.3.15. In this case, the DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the DRNS 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 which is calculated based on the following IEs (if received): *Primary CPICH Ec/No* IE or the *Enhanced Primary CPICH Ec/No* IE in the *Multicell E-DCH RL Specific Information* Response level which is calculated based on the power relative to the Primary CPICH power used by the existing Additional RLs.]
- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message to a value that uniquely identifies the RL as a RL Set within the UE Context.

The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]

- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]
- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set a same value to the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION RESPONSE message]
- [FDD For every additional E-DCH RL indicated in the Additional E-DCH RL Specific Information To Add IE, the DRNS 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 DRNS may include the corresponding E-RGCH Signature Sequence IE in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION RESPONSE message and if DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE, then it shall insert the E-RGCH/E-HICH Channelisation Code Validity Indicator IE to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]
- [FDD If the Primary CPICH Ec/No IE or the Primary CPICH Ec/No IE and the Enhanced Primary CPICH Ec/No IE in the Multicell E-DCH RL Specific Information IE measured by the UE are included for a RL in the RADIO LINK RECONFIGURATION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power for this additional RL. If the Primary CPICH Ec/No IE is not present, the DRNS shall set the Initial DL TX Power based on the power relative to the Primary CPICH power used by the existing RLs.]

# [FDD – Additional E-DCH RL Modification:]

[FDD – If the Additional E-DCH RL Specific Information To Modify IE is present in the Additional E-DCH Configuration Change Information IE, then the additional E-DCH RL indicated by the E-DCH Additional RL ID IE indicates the RL on which E-DCH resources shall be modified:]

- [FDD If the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE, the *E-HICH Power Offset* IE, and/or the *E-DCH DL Control Channel Grant* IE in the *Multicell E-DCH RL Specific Information* IE is included, the DRNS shall use the information in the same way as for the information used on the Primary uplink frequency.]
- [FDD If the *DL Reference Power* IEs is included in the *Multicell E-DCH RL Specific Information* IE and power balancing is active, DRNS shall apply DL power Control in the same way as defined for the Primary uplink frequency.]
- [FDD If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the DRNS, the DRNS shall include the *DL Power Balancing Updated Indicator* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE for each affected RL in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the RADIO LINK RECONFIGURATION RESPONSE message includes the *Primary CPICH Usage For Channel Estimation* IE and/or the *Secondary CPICH Information Change* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE, the DRNS shall avoid the new configuration in which neither the Primary CPICH nor the Secondary CPICH is used as a Phase Reference for this Radio Link.]

# [FDD – Additional E-DCH Modification:]

[FDD – If the Additional E-DCH FDD Information To Modify IE is present in the Additional E-DCH Configuration Change Information IE, then:]

- [FDD If the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the E-DCH Minimum Set E-TFCI IE and/or the E-DCH Maximum Bitrate IE is included, the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the *E-DCH Processing Overload Level* IE is included, then if the DRNS 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 DRNS shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the DL TX power upper or lower limit has been re-configured for the secondary UL frequency, the DRNS shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- [FDD The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s), and the DRNS shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE for each Radio Link when these values are changed.]
- [FDD If the Additional E-DCH serving RL is in this DRNS, the DRNS may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission. In this case the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE in the Additional Modified E-DCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

## [FDD – Additional E-DCH Removal]

[FDD – If the Additional E-DCH Cell Information RL Reconf Req IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency is "Removal", then the additional E-DCH on the secondary uplink frequency shall be removed.]

# [TDD – Intra- DRNS 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 DRNS 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.]
- [3.84Mcps TDD The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* IE in the *E-DCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28Mcps TDD The DRNS shall allocate E-AGCH parameters and E-HICH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* IE and the *E-HICH Specific Information Response* IE in the *E-DCH Information Response* 1.28Mcps IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [7.68Mcps TDD The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the E-AGCH Specific Information Response 7.68Mcps IE in the E-DCH TDD Information Response 7.68Mcps 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 DRNS to determine the transport bearer characteristics to apply in the uplink 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 DRNS 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 DRNS shall apply the parameters to the new configuration.]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E- TFCS Information* IE, the DRNS 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 and *E-DCH TDD Information* IE.]

# [1.28Mcps TDD – E-DCH Setup:]

[1.28cps 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 and *E-DCH TDD Information LCR* IE.]

[1.28Mcps TDD - If the UE TSO Capability LCR IE in the UE Capabilities Information IE in the HS-DSCH Information To Modify IE is not present, or if the UE TSO Capability LCR IE in the UE Capabilities Information IE in the HS-DSCH Information IE is not present, and if the RADIO LINK RECONFIGURATION REQUEST message includes the UE TSO Capability LCR IE in the E-DCH TDD Information LCR IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

# [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 and *E-DCH TDD Information* 7.68Mcps IE.]

# [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 DRNS 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 TDD Information To Add* IE, then the DRNS 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 UE Context, then the DRNS shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.]

[TDD- If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flows To Add* IE, then:]

- [TDD- 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 DRNS 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 DRNS 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 – The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information TDD* IE in the *E-DCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

## [1.28Mcps TDD – E-DCH Non-scheduled allocations:]

[1.28Mcps – The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information LCR TDD* IE in the *E-DCH Information Response 1.28Mcps* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

# [7.68Mcps TDD – E-DCH Non-scheduled allocations:]

[7.68Mcps TDD – The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information* 7.68Mcps *TDD* IE in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

## [3.84Mcps TDD – E-DCH Modification:]

[3.84Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH TDD Information* 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 DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [3.84Mcps TDD If the *E-DCH TDD Information* IE includes the *E-DCH Processing Overload Level* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [3.84Mcps TDD If the *E-DCH TDD Information* IE includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]

## [1.28Mcps TDD – E-DCH Modification:]

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH TDD Information LCR* IE, then:]

- [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 DRNS 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 Processing Overload Level* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS 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 DRNS shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *Multi-Carrier E-DCH Physical Layer Category LCR* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for multi-carrier E-DCH scheduling.]
- [1.28Mcps TDD If the UE TSO Capability LCR IE in the UE Capabilities Information IE in the HS-DSCH Information To Modify IE is not present, or if the UE TSO Capability LCR IE in the UE Capabilities Information IE in the HS-DSCH Information IE is not present, and if the RADIO LINK RECONFIGURATION REQUEST message includes the UE TSO Capability LCR IE in the E-DCH TDD Information LCR IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

# [7.68Mcps TDD – E-DCH Modification:]

[7.68Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH TDD Information* 7.68Mcps IE, then:]

- [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 DRNS 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 Processing Overload Level IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the E-DCH Processing Overload Level IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [7.68Mcps TDD If the *E-DCH TDD Information 7.68Mcps* IE includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset 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 DRNS 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 contains a *TNL QoS* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the DRNS 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 includes the *E-DCH MAC-d Flow Retransmission Timer* IE for an E-DCH MAC-d flow then the DRNS shall use this information to set the retransmission timer.]
- [TDD- If the *TNL QoS* IE is included in the *E-DCH TDD Information to Modify* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH HARQ Power Offset TDD* IE for an E-DCH MAC-d flow the DRNS 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 DRNS shall use this information for the related resource allocation operation.]
- [TDD- If the *E-DCH TDD Information To Modify* IE contains the *E-DCH Grant Type* IE, the DRNS 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 DRNS 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 DRNS 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 DRNS shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the DRNS 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 DRNS shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the DRNS 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 LCR* IE, the DRNS 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 the *Maximum MAC-d PDU Size Extended* IE, the DRNC 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, then the DRNS 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 –Multi-Carrier E-DCH Continue:]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Continue, Setup or Change* is "Continue", then the current Multi-Carrier E-DCH configuration shall not be changed.]

## [1.28Mcps TDD – Multi-Carrier E-DCH Setup:]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Continue, Setup or Change* is "Setup", then the *Multi-Carrier E-DCH Information LCR* IE defines the new configuration and then:]

- [1.28Mcps TDD The DRNS shall use the *Multi-Carrier E-DCH Transport Bearer Mode LCR* IE to decide the transport bearer mode in the new configuration.]
- [1.28Mcps TDD The DRNS shall setup the requested E-DCH resource on the uplink frequecies indicated by the *UARFCN* IE in the *Multi-Carrier E-DCH Information LCR* IE.]

# [1.28Mcps TDD – Multi-Carrier E-DCH Change:]

- [1.28Mcps TDD If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Continue, Setup or Change* is "Change", then the *Multi-Carrier E-DCH Information LCR* IE defines the new configuration and then:]
  - [1.28Mcps TDD If the UARFCN IE in the Multi-Carrier E-DCH Information LCR IE is different from current configured frequencies, then the DRNS shall setup the E-DCH resources, as requested in the DRNS Communication Context, on the uplink frequecies indicated by the UARFCN IE in the Multi-Carrier E-DCH Information LCR IE.]
  - [1.28Mcps TDD If the UARFCN IE in the Multi-Carrier E-DCH Information LCR IE is the same as any current configured frequency, then the DRNS shall reconfigure the E-DCH resources, as requested or as configured in the DRNS Communication Context, on the uplink frequecies indicated by the UARFCN IE in the Multi-Carrier E-DCH Information LCR IE.]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Continue, Setup or Change* is "Change" and the *Removal UL Multi-Carrier info* IE is included, then the DRNS shall remove the corresponding E-DCH configuration on the uplink frequencies indicated by the *UARFCN* IE in the *Removal UL Multi-Carrier info* IE.]

### General:

If the requested modifications are allowed by the DRNS, and if the DRNS has successfully allocated the required resources and changed to the new configuration, the DRNC shall respond to the SRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Specific DCH Information* IE, *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], the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for any Transport Channel [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included], HS-DSCH 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 Channel* [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included] or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

The DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message for any Transport Channel [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included], HS-DSCH MAC-d flow being added or E-DCH 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], HS-DSCH MAC-d flow or E-DCH MAC-d flow [FDD – for which the *Transport Bearer Not Requested Indicator* IE was not included], HS-DSCH MAC-d flow or E-DCH 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 TS 25.427 [4], subclause 5.10.1, and in TS 25.425 [32], subclause 5.3.2.

- [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 DRNC 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 DRNC establishes a transport bearer for the concerned DCH or E-DCH MAC-d flow, the
    DRNC 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 DRNC does not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow, the DRNC 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 Iur interface, the DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE only for one of the DCHs [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included] in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the DRNS, the DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE [FDD for the concerned DCH for which the *Transport Bearer Not Requested Indicator* IE is not included] in the *DCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message for only one of the combined Radio Links.

[FDD – In the case of an E-DCH RL being combined with another E-DCH RL within the DRNS, the *E-DCH FDD Information Response* IE shall be included only for one of the combined E-DCH RLs.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Additional E-DCH Cell Information RL Reconf Req* IE, then:]

- [FDD if the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "Separate Iur Transport Bearer Mode" the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]
- [FDD if the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "UL Flow Multiplexing Mode" the DRNS shall use this mode in the new configuration and multiplex MAC-d flows on the transport bearers.]
- [FDD if Separate Iur Transport Bearer Mode is used in the new configuration, then:]
  - [FDD the DRNS shall follow the rules defined in this procedure for single carrier mode of operation for establishment of the transport bearer for a MAC-d flow, use the *Transport Bearer Not Requested Indicator* IE in the *RL Specific E-DCH Information* IE in the *RL Information* IE and/or the *Transport Bearer Request Indicator* IE in the *E-DCH FDD Information To Modify* IE received for the corresponding Radio Link(s) of the Primary Uplink Frequency to determine the transport bearer configuration in the new configuration for the radio links of the Secondary Uplink Frequency.]
  - [FDD If the *Transport Layer Address* IE and *Binding ID* IE is included for an E-DCH MAC-d flow in the *Additional E-DCH MAC-d Flows Specific Information* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information*

Setup IE or in the Additional E-DCH RL Specific Information To Add IE and/or the Additional E-DCH RL Specific Information To Modify IE in the Additional E-DCH Configuration Change Information IE in the Additional E-DCH Cell Information Configuration Change IE, then the DRNS may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow. Response message in the Additional E-DCH Cell Information Response RLReconf IE the Binding ID IE and Transport Layer Address IE in the Additional E-DCH MAC-d Flow Specific Information Response IE in the Additional E-DCH FDD Information Response IE for new E-DCH radio links on the Secondary UL frequency and/or include the Binding ID IE and Transport Layer Address IE in the Additional E-DCH MAC-d Flow Specific Information Response IE for new E-DCH radio links on the Secondary UL frequency and/or include the Binding ID IE and Transport Layer Address IE in the Additional E-DCH MAC-d Flow Specific Information Response IE in the Additional Modified E-DCH FDD Information Response IE for radio links on the Secondary UL frequency that has been modified.]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Multi-Carrier E-DCH Information Reconf* IE, then:]

- [1.28Mcps TDD If the *Multi-carrier E-DCH Transport Bearer Mode LCR* IE is set to "Separate Iur Transport Bearer Mode" the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]
- [1.28Mcps TDD If the *Multi-Carrier E-DCH Transport Bearer Mode LCR* IE is set to "UL Flow Multiplexing Mode" the DRNS shall use this mode in the new configuration and multiplex each MAC-d flow on one transport bearer.]
- [1.28Mcps TDD If the choice of *Continue, Setup or Change* in the the *Multi-Carrier E-DCH Information Reconf* IE is "Setup" and the Separate Iur transport bearer mode is used in the new configuration, or if the choice of *Continue, Setup or Change* in the the *Multi-Carrier E-DCH Information Reconf* IE is "Change" and the Transport Bearer Mode is changed to "Separate Iur Transport Bearer Mode" indicated by *Multi-carrier E-DCH Transport Bearer Mode LCR* IE, then the DRNS shall include the *Binding ID* IE and *Transport Layer Address* IE in the *Multi-Carrier E-DCH Information Response LCR* IE in the RADIO LINK RECONFIGURATION RESPONSE message for establishment of a transport bearer for every E-DCH MAC-d flow being established.]
- [1.28Mcps TDD The DRNS shall follow the rules defined in this procedure for single carrier mode of operation for establishment of the transport bearer for a MAC-d flow, use the *Transport Bearer Request Indicator* IE in the *E-DCH TDD Information to Modify* IE received for the corresponding Radio Link to determine the transport bearer configuration in the new configuration for the all Uplink Frequencies.]
- [1.28Mcps TDD If the E-DCH UL flow multiplexing mode is used in the new configuration and if the *Transport Bearer Request Indicator* IE is set to "Bearer Requested ", then the DRNS shall include the *Binding ID* IE and *Transport Layer Address* IE in the *E-DCH TDD Information Response 1.28Mcps* IE in the RADIO LINK RECONFIGURATION RESPONSE message for establishment of a transport bearer for every E-DCH MAC-d flow being established.]

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

Any allowed rate for the downlink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s), and the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link when these values are changed.

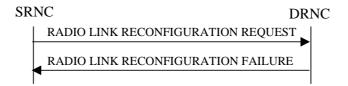
[FDD – If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH or on the F-DPCH of the RL except, if

the UE Context is configured to use DPCH in the downlink, during compressed mode, when the  $\delta P_{curr}$ , as described in TS 25.214 [10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[3.84 Mcps TDD and 7.68 Mcps TDD – If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the new value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power* IE and *CCTrCH Minimum DL TX Power*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE/CCTrCH Maximum DL TX Power IE or lower than indicated by the appropriate *Minimum DL TX Power* IE/CCTrCH Minimum DL TX Power IE on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD – If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the new value(s) for that timeslot in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE or any DL DPCH within each timeslot of the RL.]

### 8.3.7.3 Unsuccessful Operation



#### Figure 15: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation

If the DRNS cannot allocate the necessary resources for all the new DCHs in a set of co-ordinated DCHs requested to be added, it shall reject 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 DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC, indicating the reason for failure.

[FDD – If the *MIMO Activation Indicator* IE is included and the *Power Offset For S-CPICH for MIMO Request Indicator* IE is not included in the *HS-DSCH FDD Information* IE in the *HS-DSCH Serving Cell Change Information* IE in the RADIO LINK RECONFIGURATION REQUEST message or MIMO is activated and the power offset for S-CPICH for MIMO Request indicator has not been configured in the UE Context but MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the setup of the serving HS-DSCH Radio Link, and/or activation of MIMO, shall be reported as failed and the DRNC shall include in the RADIO LINK RECONFIGURATION FAILURE message the *Cause* IE.]

[FDD – If the *MIMO with four transmit antennas Activation Indicator* IE or the *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included and the *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is not included in the *HS-DSCH FDD Information* IE in the *HS-DSCH Serving Cell Change Information* IE in the RADIO LINK RECONFIGURATION REQUEST message or MIMO with four transmit antennas is activated and the power offset for S-CPICH for MIMO with four transmit antennas request indicator has not been configured in the UE Context but MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the setup of the serving HS-DSCH Radio Link, and/or activation of MIMO with four transmit antennas, shall be reported as failed and the DRNC shall include in the RADIO LINK RECONFIGURATION FAILURE message the *Cause* IE.]

Typical cause values are:

#### **Radio Network Layer Causes:**

UL Scrambling Code Already in Use; DL Radio Resources not Available; UL Radio Resources not Available; Requested Configuration not Supported; CM not Supported; E-DCH not supported; [FDD - Continuous Packet Connectivity DTX-DRX operation not Supported;] [FDD – Continuous Packet Connectivity HS-SCCH less operation not Supported;] [FDD – MIMO not supported;] [FDD – E-DCH TTI2ms 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 – SixteenQAM UL not Supported;] HS-DSCH MAC-d PDU Size Format not supported; E-DCH MAC-d PDU Size Format not available; [FDD – E-DPCCH Power Boosting not supported;] [FDD - SixtyfourQAM DL and MIMO Combined not available;] [FDD – Multi Cell operation not available;] [FDD – Multi Cell operation not supported;] [FDD – SixtyfourQAM DL and MIMO Combined not supported;] [1.28Mcps TDD – MIMO not available;] [1.28Mcps TDD- SixteenQAM UL not Supported;] [1.28Mcps TDD - SixtyfourQAM DL and MIMO Combined not available;] [FDD – Single Stream MIMO not supported;] [FDD – Single Stream MIMO not available;] [FDD – Multi Cell operation with MIMO not available;] [FDD – Multi Cell operation with MIMO not supported;] [FDD – Multi Cell E-DCH Operation not supported;] [FDD – Multi Cell E-DCH Operation not available;] [FDD – Multi Cell operation with Single Stream MIMO not available;] [FDD – Multi Cell operation with Single Stream MIMO not supported;] [FDD – Uplink Closed Loop Transmit Diversity Operation Not Available;] [FDD - Uplink Closed Loop Transmit Diversity Operation Not Supported;] [FDD – MIMO with four transmit antennas not supported;] [FDD – MIMO with four transmit antennas not available;] [FDD – Dual Stream MIMO with four transmit antennas not supported;] [FDD – Dual Stream MIMO with four transmit antennas not available;] [FDD – Multiflow Operation Not Available;] [FDD – Multiflow Operation Not Supported;] [FDD – SixtyfourQAM UL not Available;] [FDD – SixtyfourQAM UL not Supported;] [FDD – UL MIMO Operation Not Available;] [FDD – UL MIMO Operation Not Supported;] [FDD – UL MIMO and SixteenQAM Operation Not Available;] [FDD - UL MIMO and SixteenQAM Operation Not Supported;] [FDD - UL MIMO and SixtyfourQAM Operation Not Available;] [FDD – UL MIMO and SixtyfourQAM Operation Not Supported.]

#### Miscellaneous Causes:

Control Processing Overload; Not enough User Plane Processing Resources.

### 8.3.7.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed, and the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC.

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 DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure, and the DRNC 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *DL Reference Power Information* IE, but the power balancing is not active in the indicated RL(s), the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed and the DRNC 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 UE Context set to "Common" in the existing RL(s) but the *DL Reference Power Information* IE includes the *Individual DL Reference Power Information* IE, the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed and the DRNC 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 UE Context set to "Individual" in the existing RL(s) but the *DL Reference Power Information* IE includes the *Common DL Reference Power* IE, the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed and the DRNC shall respond with 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 DRNC shall reject the Unsynchronised Radio Link Reconfiguration procedure, and the DRNC shall respond with a 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 DRNC 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 DRNS, the DRNC 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 DRNC 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 UE Context, the DRNS 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE 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 MACd PDU Size Extended, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the UE 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE 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 DRNC 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 UE Context, the DRNC 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 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 DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If any of the *HS-DSCH Configured Indicator* IE, *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 DRNS 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 UE Context is not configured for E-DCH, then the DRNC 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 DRNC 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 DRNC 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 DRNC 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 DRNC 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 UE Context is not configured for E-DCH, the DRNC 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 DRNC 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 UE Context, the DRNC 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 in addition to the *Continuous Packet Connectivity* DTX-DRX Information IE, then the DRNC 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 DRNC 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 DRNC, the DRNC 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 DRNC, the DRNC 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 is not configured in the DRNC, the DRNC 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 DRNC had ignored the configuration of Transport Format Set for uplink, the DRNC 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 DRNC had ignored the configuration of Transport Format Set for downlink, the DRNC 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 or an E-DCH MAC-d flow 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 or does not contain the corresponding E-DCH MAC-d Flow ID IE in E-DCH MAC-d Flows Information IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply UL DPCCH Slot Format 0 or 2 and execute Continuous Packet Connectivity DTX-DRX operation, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply MIMO, allowed to apply 64QAM, establish the secondary serving HS-DSCH Radio Link, apply MIMO with four transmit antennas or apply Dual Stream MIMO with four transmit antennas or apply Single Stream MIMO in the new configuration but is not configured to use flexible MAC-d PDU Size, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *Additional HS Cell Information RL Reconf Req* IE indicating a new seconadry serving cell that is not in the same Node B as the serving HS-DSCH cell (or new serving in case of simultaneous serving HS-DSCH cell change), then the DRNC 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 DRNC 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 an E-DCH MAC-d flow in the *RL Specific E-DCH Information* IE but does not include the *E-DCH MAC-d flow ID* IE for the E-DCH MAC-d flow in the *E-DCH MAC-d flows Information* IE, the DRNC 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 UE Context is not previously configured to use F-DPCH, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE 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 for the Serving E-DCH Radio Link in DRNS, the DRNC 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 or an E-DCH MAC-d Flow for a specific RL and the specific RL is combined with existing RL

which the transport bearer is established for the DCH or the E-DCH MAC-d Flow in the DRNS, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If ALCAP is not used, if the concerned UE 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 DRNC 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE 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 DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains more than one of a *MIMO* Activation Indicator IE, a *MIMO with four transmit antennas Activation Indicator* IE, a *Dual Stream MIMO with four transmit antennas Activation Indicator* IE in the *HS-DSCH FDD Information* IE or in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Reconf Req* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply more than one of MIMO, MIMO with four transmit antennas, Dual Stream MIMO with four transmit antennas and Single Stream MIMO for the HS-DSCH Radio Link or the Secondary Serving Radio link, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *Additional E-DCH Cell Information RL Reconf Req* IE and if the *E-DPCH Information* IE is not present or the E-DPCH Information was not configured in the UE Context, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *Additional E-DCH Cell Information RL Reconf Req* 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 DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE in the Additional E-DCH Cell Information RL Reconf Req IE and the C-ID IE is not included but the RL indicated by the E-DCH Additional RL ID IE is not configured in the current UE context as a Secondary Serving HS-DSCH radio link without any configured Additional E-DCH, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the Additional HS Cell Information RL Reconf Req IE and the new configuration contains more than one secondary serving HS-DSCH RL, and all secondary serving HS-DSCH RLs in the new configuration will not be assigned consecutive ordinal numbers starting with the value "1"which are previously assigned to the RL or received in the Ordinal Number Of Frequency IE in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *Additional HS Cell Information RL Reconf Req* IE and the new configuration contains more than one secondary serving HS-DSCH RL, the new configuration also contains an Additional E-DCH Serving Radio Link and the secondary serving HS-DSCH Radio link, which is configured in the same cell as the Additional E-DCH Serving Radio Link does not have Ordinal Number Of Frequency value "1", the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *UL MIMO Information* IE but does not contain the *UL CLTD Information* IE, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains more than one of a *MIMO Activation Indicator* IE, a *MIMO with four transmit antennas Activation Indicator* IE, a *Dual Stream MIMO with four transmit antennas Activation Indicator* IE in *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

# 8.3.8 Physical Channel Reconfiguration

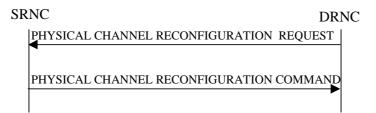
### 8.3.8.1 General

The Physical Channel Reconfiguration procedure is used by the DRNS to request the SRNC to reconfigure one of the configured physical channels.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNS shall not initiate the Physical Channel Reconfiguration procedure if a Prepared Reconfiguration exists as defined in subclause 3.1, or if a Synchronised Radio Link Reconfiguration Preparation procedure, Unsynchronised Radio Link Reconfiguration procedure or Radio Link Deletion procedure is ongoing for the relevant UE context.

### 8.3.8.2 Successful Operation



### Figure 16: Physical Channel Reconfiguration procedure, Successful Operation

When the DRNC detects the need to modify one of its physical channels, it shall send a PHYSICAL CHANNEL RECONFIGURATION REQUEST to the SRNC.

The PHYSICAL CHANNEL RECONFIGURATION REQUEST message contains the new value(s) of the physical channel parameter(s) of the radio link for which the DRNC is requesting the reconfiguration.

[FDD – If compressed mode is prepared or active and at least one of the downlink compressed mode methods is "SF/2", the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the *DL Code Information* IE in the PHYSICAL CHANNEL RECONFIGURATION REQUEST message indicating for each DL Channelisation Code whether the alternative scrambling code will be used or not if the downlink compressed mode methods "SF/2" is activated.]

[TDD – The SRNC shall apply the new values for any of [3.84Mcps TDD – UL Code Information IE, Midamble Shift And Burst Type IE,] [1.28Mcps TDD – UL Code Information LCR IE, Midamble Shift LCR IE,] [7.68 Mcps TDD – UL Code Information 7.68 Mcps IE, Midamble Shift And Burst Type 7.68 Mcps IE,] TDD DPCH Offset IE, Repetition Period IE, Repetition Length IE, or TFCI presence IE included in the UL DPCH Information IE within the PHYSICAL CHANNEL RECONFIGURATION REQUEST message, otherwise the previous values specified for this DPCH shall still apply.]

[TDD – The SRNC shall apply the new values for any of [3.84Mcps TDD – *DL Code Information* IE, *Midamble Shift* And Burst Type IE,] [1.28Mcps TDD – *DL Code Information LCR* IE, *Midamble Shift LCR* IE,] [7.68 Mcps TDD – *DL* Code Information 7.68 Mcps IE, Midamble Shift And Burst Type 7.68 Mcps IE,] TDD DPCH Offset IE Repetition Period IE, Repetition Length IE, or TFCI presence IE included in the *DL DPCH Information* IE within the PHYSICAL CHANNEL RECONFIGURATION REQUEST message, otherwise the previous values specified for this DPCH shall still apply.]

[3.84 Mcps TDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes *HS-PDSCH Timeslot Specific Information* IE the SRNC shall apply the values of the *Midamble Shift And Burst Type* IE for each HS-PDSCH timeslot.]

[1.28 Mcps TDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes *HS-PDSCH Timeslot Specific Information LCR* IE the SRNC shall apply the values of the *Midamble Shift LCR* IE for each HS-PDSCH timeslot.]

[1.28 Mcps TDD – if the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes the *PLCCH Information* IE the SRNC shall modify, delete or grant a new PLCCH assignment to the indicated timeslot of the indicated UL DCH-type CCTrCH according to its content.]

[7.68 Mcps TDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes *HS-PDSCH Timeslot Specific Information 7.68 Mcps* IE the SRNC shall apply the values of the *Midamble Shift And Burst Type 7.68 Mcps* IE for each HS-PDSCH timeslot.]

[FDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes *F-DPCH Slot Format* IE the SRNC shall apply the values of the *F-DPCH Slot Formats* IE for F-DPCH Slot Format operation.]

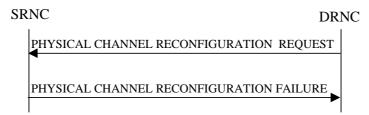
Upon receipt of the PHYSICAL CHANNEL RECONFIGURATION REQUEST, the SRNC shall decide an appropriate execution time for the change. The SRNC shall respond with a PHYSICAL CHANNEL RECONFIGURATION COMMAND message to the DRNC that includes the *CFN* IE indicating the execution time.

At the CFN, the DRNS shall switch to the new configuration that has been requested, and release the resources related to the old physical channel configuration.

[FDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes the *F*-TPICH Slot Format IE in *F*-TPICH Reconfiguration Information IE the SRNC shall apply the values of the *F*-TPICH Slot Format IE for F-TPICH Slot Format Operation.]

[FDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes the *F*-*TPICH Channelisation Code Number* IE in the *F*-*TPICH Reconfiguration Information* IE the SRNC shall use this information to configure the channelization code of F-TPICH.]

### 8.3.8.3 Unsuccessful Operation



### Figure 17: Physical Channel Reconfiguration procedure, Unsuccessful Operation

If the SRNC cannot accept the reconfiguration request it shall send the PHYSICAL CHANNEL RECONFIGURATION FAILURE message to the DRNC, including the reason for the failure in the *Cause* IE.

Typical cause values are:

#### **Radio Network Layer Causes:**

- Reconfiguration not Allowed.

### 8.3.8.4 Abnormal Conditions

While waiting for the PHYSICAL CHANNEL RECONFIGURATION COMMAND message, if the DRNC receives any of the RADIO LINK RECONFIGURATION PREPARE, RADIO LINK RECONFIGURATION REQUEST, or RADIO LINK DELETION REQUEST messages, the DRNC shall abort the Physical Channel Reconfiguration procedure. These messages thus override the DRNC request for physical channel reconfiguration.

When the SRNC receives a PHYSICAL CHANNEL RECONFIGURATION REQUEST message while a Synchronised Radio Link Reconfiguration procedure, Unsynchronised Radio Link Reconfiguration procedure or Radio Link Deletion procedure is ongoing, the SRNC shall ignore the request message and assume that receipt of any of the messages RADIO LINK RECONFIGURATION PREPARE, RADIO LINK RECONFIGURATION REQUEST or RADIO LINK

DELETION REQUEST by the DRNC has terminated the Physical Channel Reconfiguration procedure. In this case the SRNC shall not send a PHYSICAL CHANNEL RECONFIGURATION FAILURE message to the DRNC.

## 8.3.9 Radio Link Failure

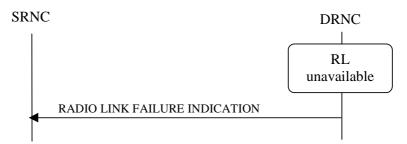
#### 8.3.9.1 General

This procedure is started by the DRNS when one or more Radio Links [FDD – or Radio Link Sets][TDD – or CCTrCHs within a Radio Link] are no longer available.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNS may initiate the Radio Link Failure procedure at any time after establishing a Radio Link.

### 8.3.9.2 Successful Operation



#### Figure 18: Radio Link Failure procedure, Successful Operation

When the DRNC 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 shall send the RADIO LINK FAILURE INDICATION message to the SRNC. The message indicates the failed Radio Link(s) [FDD – or Radio Link Set(s)] [TDD – or CCTrCHs] with the most appropriate cause values defined in the *Cause* IE. If the failure concerns one or more individual Radio Links the DRNC shall include the affected Radio Link(s) using the *RL Information* IE. [FDD – If the failure concerns one or more Radio Link Set(s) the DRNC shall include 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 in a radio link the DRNC shall include the affected CCTrCHs using the *CCTrCH ID* IE.]

When the RL Failure procedure is used to notify 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 synchronisation detection algorithm defined in TS 25.214 [10] subclause 4.3 and TS 25.224 [22] subclause 4.4.2.

[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* IE set to "Invalid CM Settings". After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the DRNS shall not remove the Radio Link(s)/Radio Link Set(s) from the UE Context, or remove the UE 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) [FDD – or 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 DRNS shall not remove the Radio Link from the UE Context, or remove the UE Context itself. When applicable, the allocation retention priorities associated with the transport channels shall be used by the DRNS to prioritise which Radio Links to indicate as unavailable to the SRNC.

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.

### 8.3.9.3 Abnormal Conditions

# 8.3.10 Radio Link Restoration

### 8.3.10.1 General

This procedure is used to notify establishment and re-establishment of UL synchronisation of one or more [FDD - RL Set(s)] [TDD – Radio Links or CCTrCH(s) in a Radio Link] on the Uu interface.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNC may initiate the Radio Link Restoration procedure at any time after establishing a Radio Link.

### 8.3.10.2 Successful Operation



### Figure 19: Radio Link Restoration procedure, Successful Operation

The DRNC shall send the RADIO LINK RESTORE INDICATION message to the SRNC when and as specified by the UL Uu synchronisation detection algorithm defined in TS 25.214 [10] subclause 4.3 and TS 25.224 [22] subclause 4.4.2 [FDD -, or when the *Fast Reconfiguration Mode* IE has been included in the RADIO LINK RECONFIGURATION COMMIT message and the DRNS has detected that the UE has changed to the new configuration. The algorithm in TS 25.214 [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.]

[TDD – If the re-established UL Uu synchronisation concerns one or more individual Radio Links the DRNC shall include in the RADIO LINK RESTORE INDICATION message the *RL Information* IE to indicate the affected Radio Link(s). If the re-established synchronisation concerns one or more individual CCTrCHs within a radio link the DRNS shall include in the RADIO LINK RESTORE INDICATION message the *RL Information* IE to indicate the affected CCTrCHs.] [FDD – If the re-established UL Uu synchronisation concerns one or more Radio Link Sets the DRNC shall include in the RADIO LINK RESTORE INDICATION message the *RL Set Information* IE to indicate the affected Radio Link Sets the DRNC shall include in the RADIO LINK RESTORE INDICATION message the *RL Set Information* IE to indicate the affected Radio Link Set(s).]

[FDD – The DRNC shall send the RADIO LINK RESTORE INDICATION message when the E-DCH processing issue condition has ceased.]

### 8.3.10.3 Abnormal Conditions

# 8.3.11 Dedicated Measurement Initiation

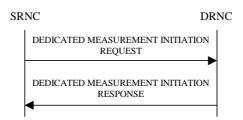
### 8.3.11.1 General

This procedure is used by an SRNS to request the initiation of dedicated measurements in a DRNS.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.11.2 Successful Operation



#### Figure 20: Dedicated Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the SRNC to the DRNC.

Upon receipt, the DRNC shall initiate the requested dedicated measurement according to the parameters given in the DEDICATED MEASUREMENT INITIATION REQUEST message.

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 the 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 the 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 UE 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 UE 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 the existing and future Radio Link Sets within the UE Context.]

[TDD – If the *DPCH ID* IE or *DPCH ID* 7.68*Mcps* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE, *DPCH ID* 7.68*Mcps* IE or *HS-SICH ID* IE is provided within the RL Information the measurement request shall apply for one existing DPCH per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this DPCH.]

[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 DRNS shall initiate measurements of the failed, missed and total HS-SICH transmissions on all of the HS-SICH assigned to this UE Context. If either the failed or missed HS-SICH transmission satisfies the requested report characteristics, the DRNS

shall report the result of both failed and missed transmission measurements along with the total number of transmissions.]

#### **Report characteristics**

The *Report Characteristics* IE indicates how the reporting of the dedicated 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 DRNS shall report the measurement result immediately in the DEDICATED MEASUREMENT INITIATION RESPONSE message. 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 (TS 25.302 [26]).

If the *Report Characteristics* IE is set to "Periodic" and if the *CFN* IE is not provided, the DRNS shall immediately and periodically initiate the Dedicated Measurement Reporting procedure for this measurement, with a frequency as specified by the *Report Periodicity* IE. If the *CFN* IE is provided, the DRNS shall initiate a Dedicated Measurement Reporting procedure for this measurement at the CFN indicated in the *CFN* IE, and shall repeat this initiation periodically thereafter with a frequency as specified by the *Report Periodicity* IE. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]).

If the *Report Characteristics* IE is set to "Event A", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold, as specified by the *Measurement Threshold* IE, and then stays above the threshold for the requested hysteresis time, as specified by the *Measurement Hysteresis Time* IE. If the *Measurement Hysteresis Time* IE is not included, the DRNC shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event B", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the requested threshold, as specified by the *Measurement Threshold* IE, and then stays below the threshold for the requested hysteresis time, as specified by the *Measurement Hysteresis Time* IE. If the *Measurement Hysteresis Time* IE is not included, the DRNC shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event C", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises more than the requested threshold specified by the *Measurement Increase/Decrease Threshold* IE, and only when this rise occurs within the requested rising time specified by the *Measurement Change Time* IE. After reporting this type of event, DRNS shall not initiate the next C event reporting for the same measurement during the subsequent time specified by the *Measurement Change Time* IE.

If the *Report Characteristics* IE is set to "Event D", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls more than the requested threshold specified by the *Measurement Increase/Decrease Threshold* IE, and only when this falls occurs within the requested falling time specified by the *Measurement Change Time* IE. After reporting this type of event, the DRNS shall not initiate the next D event reporting for the same measurement during the subsequent time specified by the *Measurement Change Time* IE.

If the *Report Characteristics* IE is set to "Event E", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the *Measurement Threshold 1* IE and stays above the threshold for the *Measurement Hysteresis Time* IE (Report A). When the conditions for Report A are met and if the *Report Periodicity* IE is provided, the DRNS shall initiate the Dedicated Measurement Reporting procedure periodically with the requested report frequency specified by the *Report Periodicity* IE. If the conditions for Report A have been met and the measured entity falls below the *Measurement Threshold 2* IE and stays below the threshold for the *Measurement Hysteresis Time* IE, the DRNS shall initiate the Dedicated Measurement Reporting procedure (Report B) and shall terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the DRNS shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the DRNC 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 DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the *Measurement Threshold 1* IE and stays below the threshold for the *Measurement Hysteresis Time* IE (Report A). When the conditions for Report A are met and if the *Report Periodicity* IE is provided, the DRNS shall initiate the Dedicated Measurement Reporting procedure periodically with the requested report frequency specified by the *Report Periodicity* IE. If the conditions for Report A have been met and the measured entity rises above the *Measurement Threshold 2* IE and stays above the threshold for the *Measurement Hysteresis Time* IE, the DRNS shall initiate the Dedicated Measurement Reporting procedure (Report B) and shall terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the DRNS shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the DRNC 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 DRNS 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(s) for which a measurement is defined exists any more, the DRNS shall terminate the measurement locally without reporting this to the SRNC.

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 DRNS 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 dedicated 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).

 $A = \frac{1}{2}^{(k/2)}$ , 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.

#### **Measurement Recovery Behavior:**

If the *Measurement Recovery Behavior* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message, the DRNS 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 8.3.12.2.

#### **Response message**

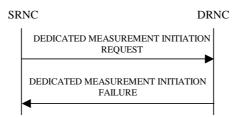
If the DRNS was able to initiate the measurement requested by the SRNS it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message. The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message.

In the case in which the Report Characteristics IE is set to "On Demand":

- The DRNC shall include the measurement result in the *Dedicated Measurement Value* IE within the DEDICATED MEASUREMENT INITIATION RESPONSE message.
- If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the DEDICATED MEASUREMENT INITIATION RESPONSE message. The reported CFN shall be the CFN at the time when the dedicated measurement value was reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]).
- [TDD If the measurement was made on a particular DPCH, the DEDICATED MEASUREMENT INITIATION RESPONSE message shall include the DPCH ID of that DPCH in the [1.28Mcps TDD and 3.84Mcps TDD – DPCH ID IE] [7.68Mcps TDD – DPCH ID 7.68Mcps IE].]
- [TDD If the measurement was made on a particular HS-SICH, the DEDICATED MEASUREMENT INITIATION RESPONSE message shall include the ID of that HS-SICH in the *HS-SICH ID* IE.]

[FDD – If the *Alternative Format Reporting Indicator* IE is set to "Alternative format is allowed" in the DEDICATED MEASUREMENT INITIATION REQUEST message, the DRNC may include the *Extended Round Trip Time* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE message.]

### 8.3.11.3 Unsuccessful Operation



### Figure 21: Dedicated Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated for one of the RL/RLS, the DRNC shall send a DEDICATED MEASUREMENT INITIATION FAILURE message. The message shall include the same *Measurement ID* IE that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and shall include the *Cause* IE set to an appropriate value.

If the DEDICATED MEASUREMENT INITIATION REQUEST message includes the *Partial Reporting Indicator* IE, the DRNS shall, if partial reporting is supported, separate the unsuccessful measurement initiations from the successful measurement initiations. For the successful measurement initiations on a RL or an RLS, the DRNS shall include the *Successful RL Information* IE or the *Successful RL Set Information* IE for the concerned RL or RLS if the Report *Characteristics* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message was set to "On Demand". For the unsuccessful measurement initiations, the DRNS shall include the *Individual Cause* IE set to an appropriate value if it differs from the value of the *Cause* IE.

Typical cause values are:

#### **Radio Network Layer Causes:**

Measurement not Supported For The Object; Measurement Temporarily not Available.

#### **Miscellaneous Causes:**

Control Processing Overload; HW Failure.

### 8.3.11.4 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 DRNS shall reject the Dedicated Measurement Initiation procedure using the DEDICATED MEASUREMENT INITIATION FAILURE message.

Dedicated	Report Characteristics Type								
Measurement Type	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
SIR	Х	Х	Х	Х	Х	Х	Х	Х	
SIR Error	Х	Х	Х	Х	Х	Х	Х	Х	
Transmitted Code Power	Х	Х	Х	Х	Х	Х	Х	Х	
RSCP	Х	Х	Х	Х	Х	Х	Х	Х	
Rx Timing Deviation	Х	Х	Х	Х			Х	Х	
Round Trip Time	Х	Х	Х	Х	Х	Х	Х	Х	
Rx Timing Deviation	Х	Х	Х	Х			Х	Х	
HS-SICH Reception Quality	Х	Х	Х	Х			Х	Х	
Angle Of Arrival LCR	Х	Х							
Rx Timing Deviation 7.68Mcps	Х	Х	Х	Х			Х	Х	
Rx Timing Deviation 3.84Mcps Extended	Х	Х	Х	Х			Х	Х	
UE transmission power headroom	Х	Х		Х				Х	

### Table 4: Allowed Dedicated Measurement Type and Report Characteristics Type combinations

If the Dedicated Measurement Type received in the *Dedicated Measurement Type* IE is not defined in TS 25.215 [11] or TS 25.225 [14] to be measured on the Dedicated Measurement Object Type received in the DEDICATED MEASUREMENT INITIATION REQUEST message, the DRNS shall reject the Dedicated Measurement Initiation procedure.

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 DRNS shall reject the Dedicated Measurement Initiation procedure, and the DRNC shall send a DEDICATED MEASUREMENT INITIATION FAILURE message.

# 8.3.12 Dedicated Measurement Reporting

### 8.3.12.1 General

This procedure is used by the DRNS to report the results of the successfully initiated measurements requested by the SRNS with the Dedicated Measurement Initiation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNC may initiate the Dedicated Measurement Reporting procedure at any time after establishing a Radio Link.

### 8.3.12.2 Successful Operation



### Figure 22: Dedicated Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the DRNS shall initiate the Dedicated Measurement Reporting procedure. If the measurement was initiated (by the Dedicated Measurement Initiation procedure) for multiple dedicated measurement objects, the DRNC may include dedicated measurement values in the *Dedicated Measurement Value Information* IE for multiple objects in the DEDICATED MEASUREMENT REPORT message.

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

If the achieved measurement accuracy does not fulfil the given accuracy requirement specified in TS 25.133 [23] and TS 25.123 [24] or the measurement is temporarily not available in case Measurement Recovery Behavior is supported, the Measurement not available shall be reported in the *Dedicated Measurement Value Information* IE in the DEDICATED MEASUREMENT REPORT message, otherwise the DRNC shall include the *Dedicated Measurement Value Information* IE. If the DRNC was configured to perform the Measurement accuracy again fullfils the given accuracy requirement (see TS 25.133 [23] and TS 25.123 [24]) and include the *Measurement Recovery Report Indicator* IE in the DEDICATED MEASUREMENT REPORT message if the requested measurement reporting criteria are not met.

If the CFN Reporting Indicator when initiating the measurement with the Dedicated Measurement Initiation procedure was set to "FN Reporting Required", the DRNC shall include the *CFN* IE in the DEDICATED MEASUREMENT REPORT message. The reported CFN shall be the CFN at the time when the dedicated measurement value was reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]).

[TDD – If the measurement was made on a particular DPCH, the DEDICATED MEASUREMENT REPORT message shall include the DPCH ID of that DPCH in the [1.28Mcps TDD and 3.84Mcps TDD – *DPCH ID* IE] [7.68Mcps TDD – *DPCH ID* 7.68Mcps IE].]

[TDD – If the measurement was made on a particular HS-SICH, the DEDICATED MEASUREMENT INITIATION RESPONSE message shall include the ID of that HS-SICH in the *HS-SICH ID* IE.]

[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 DRNC may include the *Extended Round Trip Time* IE in the DEDICATED MEASUREMENT REPORT message.]

8.3.12.3 Abnormal Conditions

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# 8.3.13 Dedicated Measurement Termination

### 8.3.13.1 General

This procedure is used by the SRNS to terminate a measurement previously requested by the Dedicated Measurement Initiation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Dedicated Measurement Termination procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.13.2 Successful Operation



#### Figure 23: Dedicated Measurement Termination procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT TERMINATION REQUEST message, sent from the SRNC to the DRNC.

Upon receipt, the DRNS shall terminate reporting of dedicated measurements corresponding to the received *Measurement ID* IE.

## 8.3.13.3 Abnormal Conditions

# 8.3.14 Dedicated Measurement Failure

### 8.3.14.1 General

This procedure is used by the DRNS to notify the SRNS that a measurement previously requested by the Dedicated Measurement Initiation procedure can no longer be reported. When partial reporting is allowed and supported, this procedure shall be used to report that measurement for one or more RL/RLS can no longer be reported.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNC may initiate the Dedicated Measurement Failure procedure at any time after establishing a Radio Link.

### 8.3.14.2 Successful Operation



### Figure 24: Dedicated Measurement Failure procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT FAILURE INDICATION message, sent from the DRNC to the SRNC, to inform the SRNC that a previously requested dedicated measurement can no longer be reported. The DRNC has locally terminated the indicated measurement. The DRNC shall include in the DEDICATED MEASUREMENT FAILURE INDICATION message the reason for the failure in the *Cause* IE.

The DRNS shall include Unsuccessful RL Information IE or the Unsuccessful RL Set Information IE for the concerned RL or RLS if partial reporting is allowed and it is supported. The DRNS shall include the Individual Cause IE set to an appropriate value if it differs from the value of the Cause IE.

Typical cause values are:

#### **Miscellaneous Causes:**

- Control Processing Overload;
- HW Failure;
- O&M Intervention.

### 8.3.14.3 Abnormal Conditions

# 8.3.15 Downlink Power Control [FDD]

### 8.3.15.1 General

The purpose of this procedure is to balance the DL transmission powers of one or more radio links for one UE.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Downlink Power Control procedure may be initiated by the SRNC at any time after establishing a Radio Link. If the SRNC has initiated in this DRNS the deletion of the last Radio Link for this UE context, the Downlink Power Control procedure shall not be initiated.

### 8.3.15.2 Successful Operation



Figure 25: Downlink Power Control procedure, Successful Operation

The Downlink Power Control procedure is initiated by the SRNC sending a DL POWER CONTROL REQUEST message to the DRNC.

The Power Adjustment Type IE defines the characteristic of the power adjustment.

If the value of the *Power Adjustment Type* IE is "Common", the DRNS shall set the Power Balancing Adjustment Type of the UE Context set to "Common". As long as the Power Balancing Adjustment Type of the UE Context is set to "Common", the DRNS shall perform the power adjustment (see below) for all existing and future radio links for the UE Context and use a common DL reference power level.

If the value of the *Power Adjustment Type* IE is "Individual", the DRNS shall set the Power Balancing Adjustment Type of the UE Context set to "Individual". The DRNS shall perform the power adjustment (see below) for all radio links addressed in the message using the given DL Reference Power per RL. If the Power Balancing Adjustment Type of the UE 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 DRNS shall set the Power Balancing Adjustment Type of the UE Context set to "None" and the DRNS shall suspend on going power adjustments for all radio links for the UE Context.

If the *Inner Loop DL PC Status* IE is present and set to "Active", the DRNS shall activate inner loop DL power control for all radio links for the UE Context. If the *Inner Loop DL PC Status* IE is present and set to "Inactive", the DRNS shall deactivate inner loop DL power control for all radio links for the UE Context according to TS 25.214 [10].

#### **Power Adjustment**

The power balancing adjustment shall be superimposed on the inner loop power control adjustment (see TS 25.214 [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 ±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 DRNC.

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.

### 8.3.15.3 Abnormal Conditions

# 8.3.16 Compressed Mode Command [FDD]

### 8.3.16.1 General

The Compressed Mode Command procedure is used to activate or deactivate the compressed mode in the DRNS for one UE-UTRAN connection. This procedure shall use the signalling bearer connection for the relevant UE Context.

The Compressed Mode Command procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.16.2 Successful Operation



### Figure 26: Compressed Mode Command procedure, Successful Operation

The procedure is initiated by the SRNC sending a COMPRESSED MODE COMMAND message to the DRNC.

Upon receipt of the COMPRESSED MODE COMMAND message from the SRNC and at the CFN indicated in the *CM Configuration Change CFN* IE, the DRNS shall deactivate all the ongoing Transmission Gap Pattern Sequences. 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 *Affected HS-DSCH serving cell List* IE is included, the concerned Transmission Gap Pattern Sequence shall be applied to HS-DSCH serving cells associated with *C-ID* IE included in *Affected HS-DSCH serving cell List* IE. Otherwise the concerned Transmission Gap Pattern Sequence shall be applied to all the configured serving cells.

If the concerned UE Context is configured to use F-DPCH in the downlink, the DRNS shall ignore, when activating the Transmission Gap Pattern Sequence(s), the downlink compressed mode method information, if existing, for the concerned Transmission Gap Pattern Sequence(s) in the Compressed Mode Configuration.

## 8.3.16.3 Abnormal Conditions

[FDD - If the *Affected HS-DSCH serving cell List* IE is included in the *Active Pattern Sequence Information* IE, and the Transmission Gap Pattern Sequence for affected HS-DSCH Serving Cells is activated on the HS-DSCH Primary Serving Cell but not for all the other serving cells, the DRNS shall initiate the Radio Link Failure procedure with the cause value "Invalid CM Settings".]

# 8.3.17 Downlink Power Timeslot Control [TDD]

### 8.3.17.1 General

The purpose of this procedure is to provide the DRNS with updated DL Timeslot ISCP values to use when deciding the DL TX Power for each timeslot.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Downlink Power Timeslot Control procedure can be initiated by the SRNC at any time after establishing a Radio Link. If the SRNC has initiated deletion of the last Radio Link in this DRNS, the Downlink Power Timeslot Control procedure shall not be initiated.

### 8.3.17.2 Successful Operation



### Figure 26A: Downlink Power Timeslot Control procedure, Successful Operation

The Downlink Power Timeslot Control procedure is initiated by the SRNC sending a DL POWER TIMESLOT CONTROL REQUEST message to the DRNC.

Upon receipt of the DL POWER TIMESLOT CONTROL REQUEST message, the DRNS shall use the included [3.84Mcps TDD and 7.68 Mcps TDD – *DL Timeslot ISCP Info* IE] [1.28Mcps TDD – *DL Timeslot ISCP Info LCR* IE] value when deciding the DL TX Power for each timeslot as specified in TS 25.224 [22], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link in which the interference is low, and increase the DL TX power in those timeslots in which 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 DRNS shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per TS 25.123 [24], 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 DRNS shall assume that the reported value is in the non-negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If control to the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the DRNS shall assume that the reported value is in the non-negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS should use the indicated value for HS-DSCH scheduling and transmit power adjustment.

### 8.3.17.3 Abnormal Conditions

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# 8.3.18 Radio Link Pre-emption

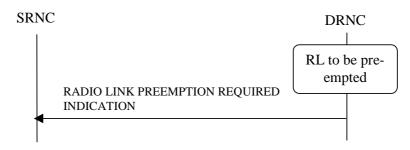
### 8.3.18.1 General

This procedure is started by the DRNS when resources need to be freed.

This procedure shall use the signalling bearer connection for the UE Context associated with the RL to be pre-empted.

The DRNS may initiate the Radio Link Pre-emption procedure at any time after establishing a Radio Link.

### 8.3.18.2 Successful Operation



#### Figure 26B: Radio Link Pre-emption procedure, Successful Operation

When DRNC detects that one or more Radio Link(s) should be pre-empted (see Annex A), it shall send the RADIO LINK PREEMPTION REQUIRED INDICATION message to the SRNC. If all Radio Links for a UE Context should be pre-empted, the *RL Information* IE shall not be included in the message. If one or several but not all Radio Link(s) should be pre-empted for an UE Context, the Radio Link(s) 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 SRNC.

[FDD – If only the E-DCH traffic on a Radio Link should be pre-empted, the DRNC shall indicate the EDCH MAC-d flows that should be pre-empted by including the *E-DCH MAC-d Flow Specific Information* IE in the RADIO LINK PREEMPTION REQUIRED INDICATION message.]

When only the HS-DSCH traffic on a Radio Link should be pre-empted, the DRNC shall indicate the HS-DSCH MACd flow(s) that should be pre-empted by including the *HS-DSCH MAC-d Flow Specific Information* IE in the RADIO LINK PREEMPTION REQUIRED INDICATION message.

8.3.18.3 Abnormal Conditions

# 8.3.19 Radio Link Congestion

### 8.3.19.1 General

This procedure is started by the DRNS when resource congestion is detected and the rate of one or more DCHs, corresponding to one or more radio links, is preferred to be limited in the UL and/or DL. This procedure is also used by the DRNC to indicate to the SRNC any change of the UL/DL resource congestion situation, affecting these radio links. This procedure shall use the signalling bearer connection for the relevant UE Context.

The Radio Link Congestion procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.19.2 Successful Operation



Figure 26C: Radio Link Congestion procedure, Successful Operation

#### Start of an UL/DL Resource Congestion Situation

When the DRNC detects the start of a UL/DL resource congestion situation and prefers the rate of one or more DCHs for one or more Radio Link(s) to be limited below the maximum rate currently configured in the UL/DL TFS, it shall send the RADIO LINK CONGESTION INDICATION message to the SRNC. The DRNC shall indicate the cause of the congestion in the *Congestion Cause* IE and shall indicate all the Radio Links for which the rate of a DCH needs to be reduced. For each DCH within the RL with UL congestion, the DRNC shall indicate the desired maximum UL data rate with the *Allowed UL Rate* IE in the *Allowed Rate Information* IE. For each DCH within the RL with DL congestion, the DRNC shall indicate the desired maximum DL data rate with the *Allowed DL Rate* IE in the *Allowed Rate Information* IE.

[FDD – For each E-DCH MAC-d flow within the RL with UL congestion, the DRNC shall indicate all the MAC-d flows for which the rate cannot be fullfilled.]

When receiving the RADIO LINK CONGESTION INDICATION message the SRNC should reduce the rate in accordance with the *Congestion Cause* IE and the indicated *Allowed DL Rate* IE and/or *Allowed UL Rate* IE for a DCH.

[FDD – If the RADIO LINK CONGESTION INDICATION message includes the *DCH Indicator For E-DCH-HSDPA Operation* IE, then the SRNS shall ignore the *DCH Rate Information* IE in the RADIO LINK CONGESTION INDICATION message.]

#### Change of UL/DL Resource Congestion Situation

The DRNC shall indicate any change of the UL/DL resource congestion situation by sending the RADIO LINK CONGESTION INDICATION message in which the new allowed rate(s) of the DCHs are indicated by the *Allowed Rate Information* IE. In the case that for at least one DCH the new allowed rate is lower than the previously indicated allowed rate for that DCH, the *Congestion Cause* IE, indicating the cause of the congestion, shall also be included.

When receiving a RADIO LINK CONGESTION INDICATION message indicating a further rate decrease on any DCH(s) on any RL, the SRNC should reduce the rate in accordance with the indicated congestion cause and the indicated allowed rate(s) for the DCH(s).

#### End of UL/DL Resource Congestion Situation

The end of an UL resource congestion situation, affecting a specific RL, shall be indicated by including the TF corresponding to the highest data rate in the *Allowed UL Rate* IE in the *Allowed Rate Information* IE for the concerned RL. The end of a DL resource congestion situation, affecting a specific RL, shall be indicated by including the TF with the highest data rate in the *Allowed DL Rate* IE in the *Allowed Rate Information* IE for the concerned RL.

### 8.3.19.3 Abnormal Conditions

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### 8.3.20 Radio Link Activation

### 8.3.20.1 General

This procedure is used to activate or de-activate the DL transmission on the Uu interface regarding selected RLs.

### 8.3.20.2 Successful Operation



Figure 26D: Radio Link Activation procedure

This procedure is initiated by sending the RADIO LINK ACTIVATION COMMAND message from the SRNC to the DRNC. This procedure shall use the signalling bearer connection for the relevant UE Context.

Upon receipt, the DRNS 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 TS 25.427 [4].]
    - [TDD start transmission on the new RL immediately as specified in TS 25.427 [4].]
  - 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 TS 25.427 [4], 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 TS 25.427 [4].]
  - [FDD the DRNS 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 TS 25.214 [10], subclause 5.2.1.2) and downlink power balancing adjustments (see 8.3.7).]

- [TDD the DRNS 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 TS 25.224 [22], subclause 4.2.3.3).]
- [FDD if the *Propagation Delay* IE and optionally the *Extended Propagation Delay* IE are included, the DRNS 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 DRNS 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 TS 25.214 [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".

### 8.3.20.3 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 DRNC shall initiate the ERROR INDICATION procedure.]

## 8.3.21 Radio Link Parameter Update

### 8.3.21.1 General

The Radio Link Parameter Update procedure is executed by the DRNS to update parameters related to HS-DSCH [FDD - or E-DCH or UL CLTD] on a radio link for a UE-UTRAN connection or to update phase reference on a list of the radio links.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Radio Link Parameter Update procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.21.2 Successful Operation



### Figure 26E: Radio Link Parameter Update Indication, Successful Operation

The Radio Link Parameter Update procedure is initiated by the DRNS by sending the RADIO LINK PARAMETER UPDATE INDICATION message to the SRNC.

#### HS-DSCH related Parameter(s) Updating:

If RADIO LINK PARAMETER UPDATE INDICATION message is used to update the parameters related to HS-DSCH, it contains suggested value(s) of the HS-DSCH related parameter(s) that should be reconfigured on the radio link.

If the DRNS needs to update HS-DSCH related parameters, the DRNS 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 DRNS needs to allocate new HS-SCCH Codes, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-SCCH Code Change Indicator* IE.

[FDD – If the DRNS needs to allocate new HS-PDSCH Codes, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-PDSCH Code Change Indicator* IE.]

[FDD – If the DRNS 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 DRNS 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.]

[TDD – If the DRNS needs to update the TDD ACK-NACK Power Offset the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *TDD ACK-NACK Power Offset* IE.]

#### [FDD – Secondary Serving HS-DSCH related Parameter(s) Updating:]

[FDD – If RADIO LINK PARAMETER UPDATE INDICATION message is used to update the parameters related to secondary serving HS-DSCH, it contains suggested value(s) of the secondary serving HS-DSCH related parameter(s) that should be reconfigured on the radio link.]

[FDD – If the DRNS needs to update secondary serving HS-DSCH related parameters, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message and include the *Additional HS Cell Information RL Param Upd* IE.]

- [FDD – If the DRNS needs to allocate new secondary serving HS-SCCH Codes, the DRNS shall include the HS-SCCH Code Change Indicator IE in the HS-DSCH FDD Secondary Serving Update Information IE.]

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

[FDD – If DRNS needs to update phase reference for the channel estimation for one or several Radio Links, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Phase Reference Update Information* IE for the concerned RL(s).]

#### [FDD – E-DCH:]

[FDD – If DRNS needs to update E-DCH related parameters, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *E-DCH FDD Update Information* IE.]

[FDD – If the DRNS needs to update the HARQ process allocation for non-scheduled transmission and/or HARQ process allocation for scheduled Transmission, the DRNS 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 DRNS 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 DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *E-DCH DL Control Channel Change Information* IE.]

[FDD – If the DRNS needs to update Additional E-DCH related parameters, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Additional E-DCH Cell Information RL Param Upd* IE.]

- [FDD If the DRNS needs to update the HARQ process allocation for scheduled Transmission, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including the *HARQ Process Allocation For 2ms Scheduled Transmission Grant*.]
- [FDD If the DRNS 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 DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Additional E-DCH DL Control Channel Change Information* IE.]

#### [FDD – UL CLTD:]

[FDD - If the DRNS needs to update the local activation state of UL CLTD of the UE in UL CLTD operation, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION including the UL CLTD State Update Information IE.]

#### [FDD – CPC Recovery:]

[FDD – If the DRNS needs to indicate that the CPC Recovery has been initiated, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including CPC Recovery Report IE.]

#### 8.3.21.3 Abnormal Conditions

#### 8.3.22 UE Measurement Initiation [TDD]

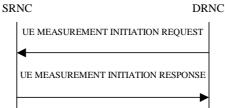
#### 8.3.22.1 General

This procedure is used by a DRNC to request the initiation of UE measurements by the SRNC.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The UE Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

#### 8.3.22.2 Successful Operation



### Figure 26F: UE Measurement Initiation procedure, Successful Operation

The procedure is initiated with a UE MEASUREMENT INITIATION REQUEST message sent from the DRNC to the SRNC.

Upon receipt the SRNC shall, provided that it determines that the measurement can be performed by the UE, initiate and forward the requested UE measurement according to the parameters given in the UE MEASUREMENT INITIATION REQUEST message. If the UE MEASUREMENT INITIATION REQUEST message includes the UE Measurement Parameter Modification Allowed IE with a value of "Parameter Modification Allowed" the UE Measurement Report Characteristics IE and the Measurement Filter Coefficient IE, if it is included, are suggested values, otherwise the values of these parameters must be fulfilled.

[3.84 Mcps TDD – If the UE Measurement Timeslot Information HCR IE is provided, the measurement request shall apply for the requested timeslot(s) individually. If the UE Measurement Timeslot Information HCR IE are not provided the SRNC may choose the timeslots for measurements that apply to individual timeslots.]

[1.28 Mcps TDD – If the UE Measurement Timeslot Information LCR IE is provided, the measurement request shall apply for the requested timeslot(s) individually. If the UE Measurement Timeslot Information LCR IE are not provided the SRNC may choose the timeslots for measurements that apply to individual timeslots.]

[7.68 Mcps TDD – If the UE Measurement Timeslot Information 7.68 Mcps IE is provided, the measurement request shall apply for the requested timeslot(s) individually. If the UE Measurement Timeslot Information 7.68 Mcps IE are not provided the SRNC may choose the timeslots for measurements that apply to individual timeslots.]

If the UE MEASUREMENT INITIATION REQUEST message includes the Allowed Oueuing Time IE the SRNC may queue the request for a time period not to exceed the value of the Allowed Queuing Time IE before starting to execute the request.

The SRNC is required to perform reporting for a UE measurement object, in accordance with the conditions provided in the UE MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no UE measurement object(s) for which a measurement is defined exists any more, the SRNC shall terminate the measurement locally without reporting this to the DRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event 1h, Event 1i,Event 6a, Event 6b, Event 6c, or Event 6d, the SRNC shall initiate the UE Measurement Reporting procedure immediately, and then continue with the measurements as specified in the UE MEASUREMENT INITIATION REQUEST message.

At the start of a periodic measurement, the SRNC shall not initiate UE Measurement Reporting procedure until the next measurement is received from the UE, even if measurement data is available.

#### **Report characteristics**

The UE Measurement Report Characteristics IE indicates how the reporting of the dedicated measurement shall be performed. See TS 25.331 [16].

#### **Higher layer filtering**

The *Measurement Filter Coefficient* IE indicates how filtering of the dedicated measurement values shall be performed before measurement event evaluation and reporting. If the *Measurement Filter Coefficient* IE is not present, *a* shall be set to 1 (no filtering). The use of the *Measurement Filter Coefficient* IE is shown in TS 25.331 [16].

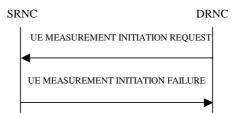
#### **Response message**

If the SRNC was able to initiate the measurement requested by the DRNC it shall respond with the UE MEASUREMENT INITIATION RESPONSE message. The message shall include the same Measurement ID that was used in the UE MEASUREMENT INITIATION REQUEST message.

If the DRNC allowed parameter modification and the SRNC modified the *Measurement Filter Coefficient* IE the SRNC shall include the modified value in the UE MEASUREMENT INTIATION RESPONSE message.

If the DRNC allowed parameter modification and the SRNC modified the *UE Measurement Report Characteristics* IE the SRNC shall include the modified value in the UE MEASUREMENT INTIATION RESPONSE message.

### 8.3.22.3 Unsuccessful Operation



#### Figure 26G: UE Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the SRNC shall send a UE MEASUREMENT INITIATION FAILURE message. The message shall include the same *Measurement ID* IE that was used in the UE MEASUREMENT INITIATION REQUEST message and shall include the *Cause* IE set to an appropriate value.

Typical cause values are:

#### **Radio Network Layer Causes:**

Measurement not Supported For The Object; Measurement Temporarily not Available; Measurement Repetition Rate not Compatible with Current Measurements; UE not Capable to Implement Measurement.

#### Miscellaneous Causes:

Control Processing Overload; HW Failure.

### 8.3.22.4 Abnormal Conditions

# 8.3.23 UE Measurement Reporting [TDD]

### 8.3.23.1 General

This procedure is used by the SRNC to report the results of the successfully initiated measurements requested by the DRNC with the UE Measurement Initiation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The SRNC may initiate the UE Measurement Reporting procedure at any time after establishing a Radio Link.

### 8.3.23.2 Successful Operation



#### Figure 26H: UE Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria was met in the UE and reported to the SRNC, the SRNC shall initiate the UE Measurement Reporting procedure. The *Measurement ID* IE shall be set to the Measurement ID provided by the DRNC when initiating the measurement with the UE Measurement Initiation procedure.

If Primary CCPCH RSCP is being reported:

- If the *Primary CCPCH RSCP Delta* IE is included, the DRNC shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP Delta* IE.
- If the *Primary CCPCH RSCP Delta* IE is not included the DRNC shall assume that the reported value is in the non negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE.

If the achieved measurement accuracy does not fulfil the given accuracy requirement specified in TS 25.123 [24], the Measurement not available shall be reported in the *UE Measurement Value Information* IE in the UE MEASUREMENT REPORT message, otherwise the SRNC shall include the *UE Measurement Value* IE within the *UE Measurement Value Information* IE.

### 8.3.23.3 Abnormal Conditions

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# 8.3.24 UE Measurement Termination [TDD]

### 8.3.24.1 General

This procedure is used by the DRNC to terminate a measurement previously requested by the UE Measurement Initiation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The UE Measurement Termination procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.24.2 Successful Operation



#### Figure 26I: UE Measurement Termination procedure, Successful Operation

This procedure is initiated with a UE MEASUREMENT TERMINATION REQUEST message, sent from the DRNC to the SRNC.

Upon receipt, the SRNC shall terminate forwarding of UE measurements corresponding to the received *Measurement ID* IE.

### 8.3.24.3 Abnormal Conditions

# 8.3.25 UE Measurement Failure [TDD]

### 8.3.25.1 General

This procedure is used by the SRNC to notify the DRNC that a measurement previously requested by the UE Measurement Initiation procedure can no longer be reported.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The SRNC may initiate the UE Measurement Failure procedure at any time after establishing a Radio Link.

### 8.3.25.2 Successful Operation



#### Figure 26J: UE Measurement Failure procedure, Successful Operation

This procedure is initiated with a UE MEASUREMENT FAILURE INDICATION message, sent from the SRNC to the DRNC, to inform the DRNC that a previously requested UE measurement can no longer be reported. The SRNC has locally terminated the forwarding of the indicated measurement. The SRNC shall include in the UE MEASUREMENT FAILURE INDICATION message the reason for the failure in the *Cause* IE.

Typical cause values are:

#### Miscellaneous Causes:

- Control Processing Overload;
- HW Failure;
- O&M Intervention.

## 8.3.25.3 Abnormal Conditions

# 8.3.26 lur Invoke Trace

### 8.3.26.1 General

The purpose of the Iur Invoke Trace procedure is to inform the DRNC that it should begin a Trace Session for a given UE Context according to the Trace Parameters indicated by the SRNC. This procedure is used for Trace Parameter Propagation in the Signalling Based Activation mechanism as defined in TS 32.421 [48] and TS 32.422 [49].

This procedure shall use the signalling bearer mode specified below.

### 8.3.26.2 Successful Operation



Figure 26K: Iur Invoke Trace procedure, Successful Operation

The Iur Invoke Trace procedure is invoked by the SRNC by sending an IUR INVOKE TRACE message to the DRNC.

When the concerned UE is utilising one or more radio links in the DRNC the message shall be sent using the connection oriented service of the signalling bearer and no further identification of the UE Context in the DRNC is required. If on the other hand, the UE is not utilising any radio link the message shall be sent using the connectionless service of the signalling bearer and the *D*-*RNTI* IE shall be included in the message to identify the UE Context in the DRNC.

Upon receiving the IUR INVOKE TRACE message, the DRNC should begin a Trace Recording Session according to the parameters indicated in the IUR INVOKE TRACE message.

If the *List Of Interfaces To Trace* IE is included in the IUR INVOKE TRACE message, the DRNC shall trace, for the concerned UE Context, the interfaces indicated by the *List Of Interfaces To Trace* IE. Otherwise, the DRNC shall trace, for the concerned UE Context, the Iur and Iub interfaces.

The values of the *UE Identity* IE, *Trace Reference* IE and *Trace Recording Session Reference* IE are used to tag the Trace Record to allow simpler construction of the total record by the entity which combines Trace Records.

If the DRNC does not support the requested value "Minimum" or "Medium" of the *Trace Depth* IE, the DRNC should begin a Trace Recording Session with maximum Trace Depth.

The DRNC may not start a Trace Recording Session if there are insufficient resources available within the DRNC.

If the *MDT Configuration* IE is included and the *MDT Activation* IE is set to "MDT and Trace" then the DRNC shall, if supported, initiate the requested trace function and MDT function as described in TS 32.422 [49].

If the *MDT Configuration* IE is included and the *MDT Activation* IE is set to "MDT Only" then the DRNC shall, if supported, initiate the requested MDT function as described in TS 32.422 [49] and shall ignore the List of *Interfaces to Trace* IE and the *Trace Depth* IE.

If *Trace Collection Entity IP Address* IE is included and if the *MDT Configuration* IE is also included then the DRNC shall, if supported, store the Trace Collection Entity IP address and use it when transferring Trace records, otherwise if *MDT Configuration* IE is not included, the DRNC may use the Trace Collection Entity IP address when transferring trace records.

### 8.3.26.3 Abnormal Conditions

If the *MDT Configuration* IE is included in the IUR INVOKE TRACE message and the *Trace Collection Entity IP Address* IE is not included, the DRNC shall ignore the MDT Configuration.

# 8.3.27 Iur Deactivate Trace

### 8.3.27.1 General

The purpose of the Iur Deactivate Trace procedure is to inform the DRNC that it should stop a Trace Session for the concerned UE Context and the indicated Trace Reference. This procedure is used for the Signalling Based Deactivation mechanism as defined in TS 32.421 [48] and TS 32.422 [49].

This procedure shall use the signalling bearer mode specified below.

### 8.3.27.2 Successful Operation



### Figure 26L: lur Invoke Trace procedure, Successful Operation

The Iur Deactivate Trace procedure is invoked by the SRNC by sending an IUR DEACTIVATE TRACE message to the DRNC.

When the concerned UE is utilising one or more radio links in the DRNC the message shall be sent using the connection oriented service of the signalling bearer and no further identification of the UE Context in the DRNC is required. If on the other hand, the UE is not utilising any radio link the message shall be sent using the connectionless service of the signalling bearer and the *D*-*RNTI* IE shall be included in the message to identify the UE Context in the DRNC.

Upon receiving the IUR DEACTIVATE TRACE message, the DRNC shall stop for the concerned UE Context any ongoing Trace Recording Session for the Trace Session identified by the *Trace Reference* IE.

## 8.3.27.3 Abnormal Conditions

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# 8.3.28 Enhanced Relocation

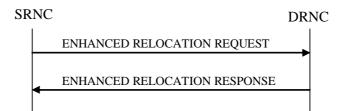
### 8.3.28.1 General

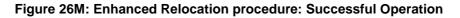
This procedure is used for relocation of SRNS in case the SRNC and DRNC connect to same CN node.

The connection-oriented service of the signalling bearer shall be established in conjunction with this procedure in case the relevant UE Context does not exist for the UE.

This procedure shall use the signalling bearer connection for the relevant UE Context in the UE Context exists. The Enhanced Relocation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.28.2 Successful Operation

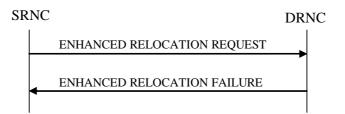




The SRNC initiates the procedure by sending an ENHANCED RELOCATION REQUEST message. When the SRNC sends the ENHANCED RELOCATION REQUEST message, it shall start the timer  $T_{RELOCprep}$ . The ENHANCED RELOCATION REQUEST message shall contain the *Cause* IE with an appropriate value e.g.: "Time critical Relocation", "Resource optimisation relocation", "Relocation desirable for radio reasons", "Directed Retry", "Reduce Load in Serving Cell", "No Iu CS UP relocation".

If the ENHANCED RELOCATION REQUEST message includes SRNC-ID, the DRNC shall create a UE Context for this UE, allocate a D-RNTI for the UE Context.

### 8.3.28.3 Unsuccessful Operation



#### Figure 26N: Enhanced Relocation procedure: Unsuccessful Operation

If the DRNC is not able to accept any of the RABs or a failure occurs during the procedure, the DRNC shall send the ENHANCED RELOCATION FAILURE message to the SRNC. The message shall contain the *Cause* IE with an appropriate value.

#### Interactions with Enhanced Relocation Cancel procedure:

If there is no response from the DRNC to the ENHANCED RELOCATION REQUEST message before timer  $T_{RELOCprep}$  expires in the DRNC, the SRNC should cancel the Enhanced Relocation procedure towards the DRNC by initiating the Enhanced Relocation Cancel procedure with the appropriate value for the *Cause* IE, e.g. " $T_{RELOCprep}$  expiry". The SRNC shall ignore any ENHANCED RELOCATION RESPONSE or ENHANCED RELOCATION FAILURE message received after the initiation of the Enhanced Relocation Cancel procedure and remove any reference and release any resources related to the concerned UE Context.

### 8.3.28.4 Abnormal Conditions

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# 8.3.29 Enhanced Relocation Cancel

### 8.3.29.1 General

This procedure is used to cancel an ongoing enhanced relocation or an already prepared relocation.

This procedure shall use the signalling bearer connection for the relevant UE Context.

### 8.3.29.2 Successful Operation



### Figure 26O: Enhanced Relocation Cancel procedure: Successful Operation

The SRNC initiates the procedure by sending the ENHANCED RELOCATION CANCEL message to the DRNC. The SRNC shall indicate the reason for cancelling the relocation by means of an appropriate cause value. Typical cause values are " $T_{RELOCprep}Expiry$ ", "Relocation Cancelled", "Traffic Load In The Target Cell Higher Than In The Source Cell".

At the reception of the ENHANCED RELOCATION CANCEL message, the DRNC shall remove any reference to, and release any resources previously reserved to the concerned UE context.

### 8.3.29.3 Unsuccessful Operation

Not applicable.

### 8.3.29.4 Abnormal Conditions

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# 8.3.30 Enhanced Relocation Signalling Transfer

### 8.3.30.1 General

The procedure is used by the SRNC to transfer DL L3 information to DRNC during enhanced relocation.

This procedure shall use the signalling bearer connection for the relevant UE Context.

### 8.3.30.2 Successful Operation

SRNC DRNC

### Figure 26P: Enhanced Relocation Signalling Transfer procedure, Successful Operation

The procedure consists of the ENHANCED RELOCATION SIGNALLING TRANSFER message sent by the SRNC to the DRNC.

The ENHANCED RELOCATION SIGNALLING TRANSFER message contains the L3 Information and after the receipt of the message, the DRNC shall send the L3 Information on the DCCH.

## 8.3.30.3 Abnormal Conditions

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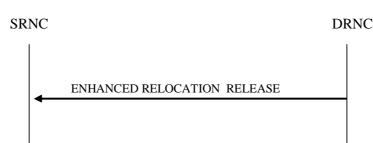
# 8.3.31 Enhanced Relocation Release

# 8.3.31.1 General

The procedure is used by the DRNC to signal to the SRNC that resource for CN domain is released due to failure of the enhanced relocation.

This procedure shall use the signalling bearer connection for the relevant UE Context.

### 8.3.31.2 Successful Operation



### Figure 26Q: Enhanced Relocation Signalling Transfer procedure, Successful Operation

The procedure consists of the ENHANCED RELOCATION RELEASE message sent by the DRNC to the SRNC.

Upon reception of the ENHANCED RELOCATION RELEASE message, the SRNC shall release related resources associated to indicated CN domain(s) by the *Released CN Domain* IE in the message for the UE context.

### 8.3.31.3 Abnormal Conditions

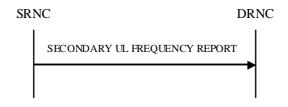
# 8.3.32 Secondary UL Frequency Reporting [FDD]

### 8.3.32.1 General

The purpose of this procedure is to inform the DRNS about the activation state of the secondary UL frequency of the UE in Dual Cell E-DCH operation.

This procedure shall use the signalling bearer connection for the relevant UE Context.

### 8.3.32.2 Successful Operation



### Figure 26R: Secondary UL Frequency Reporting procedure

The Secondary UL Frequency Reporting procedure is initiated by sending the SECONDARY UL FREQUENCY REPORT message from the SRNC to the DRNC.

The *Activation Information* IE defines the local activation state of the Secondary uplink frequency of the UE in Dual Cell E-DCH operation.

- If the value of *Uu Activation State* IE is "Activated": the DRNS shall if supported use this information for resource allocation operation of the secondary E-DCH radio link(s), F-DPCH transmission and DPCCH detection.

- If the value of *Uu Activation State* IE is "De-Activated": the DRNS shall if supported use this information for release of the related resources for the secondary E-DCH radio link(s), cease of F-DPCH transmission and DPCCH detection.

### 8.3.32.3 Abnormal Conditions

# 8.3.33 Secondary UL Frequency Update [FDD]

### 8.3.33.1 General

The purpose of this procedure is to inform the SRNC about updates to activation state of the secondary UL frequency of the UE in Dual Cell E-DCH operation .

This procedure shall use the signalling bearer connection for the relevant UE context.

### 8.3.33.2 Successful Operation

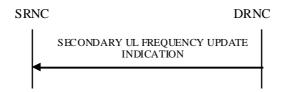


Figure 26S: Secondary UL Frequency Update procedure

The Secondary UL Frequency Update procedure is initiated by the DRNS by sending the SECONDARY UL FREQUENCY UPDATE INDICATION message to the SRNC.

If the DRNS needs to update the local activation state of the Secondary uplink frequency of the UE in Dual Cell E-DCH operation, the DRNS shall send SECONDARY UL FREQUENCY UPDATE INDICATION message and include the *Activation Information* IE.

### 8.3.33.3 Abnormal Conditions

8.4 Common Transport Channel Procedures

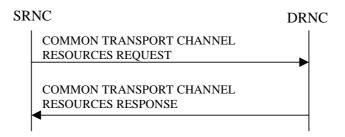
# 8.4.1 Common Transport Channel Resources Initialisation

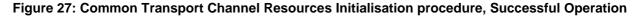
### 8.4.1.1 General

The Common Transport Channel Resources Initialisation procedure is used by the SRNC for the initialisation of the Common Transport Channel user plane towards the DRNC and/or for the initialisation of the Common Transport Channel resources in the DRNC to be used by a UE.

This procedure shall use the connectionless mode of the signalling bearer.

### 8.4.1.2 Successful Operation





The SRNC initiates the procedure by sending the message COMMON TRANSPORT CHANNEL RESOURCES REQUEST message to the DRNC.

If the value of the *Transport Bearer Request Indicator* IE is set to "Bearer Requested", the DRNC shall store the received *Transport Bearer ID* IE. The DRNC may use the *Transport Layer Address* and *Binding ID* IEs included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message received from the SRNC when establishing a transport bearer for the common transport channel. In addition, the DRNC shall include its own *Binding ID* IE and *Transport Layer Address* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNC to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related common transport channels.

If the value of the *Transport Bearer Request Indicator* IE is set to" Bearer not Requested", the DRNC shall use the transport bearer indicated by the *Transport Bearer ID* IE.

If the *C-ID* IE is included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall allocate a C-RNTI for the indicated cell and include the *C-RNTI* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

If the *C-ID* IE is included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall include the *FACH Info for UE Selected S-CCPCH* IE valid for the cell indicated by the *C-ID* IE and the corresponding *C-ID* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If the *C-ID* IE is not included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall include the *FACH Info for UE Selected S-CCPCH* IE valid for the cell where the UE is located and the corresponding *C-ID* IE. The DRNC shall include the *FACH Scheduling Priority* IE and *FACH Initial Window Size* IE in the *FACH Flow Control Information* IE of the *FACH Info for UE Selected S-CCPCH* IE for each priority class that the DRNC has determined shall be used. The DRNC may include several *MAC-c/sh SDU Length* IEs for each priority class.

If the DRNS has any RACH and/or FACH [FDD – and/or HS-DSCH] [1.28Mcps TDD – and/or HS-DSCH] resources previously allocated for the UE in another cell than the cell in which resources are currently being allocated, the DRNS shall release the previously allocated RACH and/or FACH resources [FDD – and/or HS-DSCH] [1.28Mcps TDD – and/or HS-DSCH].

If the DRNS has successfully reserved the required resources, the DRNC shall respond to the SRNC with the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

If the *Permanent NAS UE Identity* IE is present in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNS shall store the information for the considered UE Context for the lifetime of the UE Context.

If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes a *C-ID* IE corresponding to a cell reserved for operator use and the Permanent NAS UE Identity is available in the DRNC for the considered UE Context, the DRNC shall use this information to determine whether it can reserve resources on a common transport channel in this cell or not.

If the *MBMS Bearer Service List* IE is included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall, if supported, perform the UE Linking as specified in TS 25.346 [50], section 5.1.6. If an MBMS session for some MBMS bearer services contained in the UE Link is ongoing in the cell identified by the *C-ID* IE, the DRNC shall include in the *Active MBMS Bearer Service List* IE the *Transmission Mode* IE for each of these active MBMS bearer services in the COMMON TRANPORT CHANNEL RESOURCES RESPONSE message.

[FDD – If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes an *Enhanced FACH* Support Indicator IE, the DRNC may include the *Enhanced FACH Information Response* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If a HS-DSCH RNTI was not previously allocated to the UE or a new HS-DSCH RNTI is allocated to the UE, the DRNC shall include the *HS-DSCH-RNTI* IE in the *Enhanced FACH Information Response* IE. And if Enhanced PCH operation is activated in the cell indicated by the *C-ID* IE, the DRNC shall include the *Priority Queue Information for Enhanced PCH* IE in the *Enhanced FACH Information Response* IE.]

[1.28Mcps TDD – If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes an *Enhanced FACH Support Indicator* IE, the DRNC may include the *Enhanced FACH Information Response* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If a HS-DSCH RNTI was not previously allocated to the UE or a new HS-DSCH RNTI is allocated to the UE, the DRNC shall include the *HS-DSCH-RNTI* IE in the *Enhanced FACH Information Response* IE. And if Enhanced PCH operation is activated in the cell indicated by the

*C-ID* IE, the DRNC shall include the *Priority Queue Information for Enhanced PCH* IE in the *Enhanced FACH Information Response* IE.]

[FDD – If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes an *Common E-DCH Support Indicator* IE, the DRNC may include the *Common E-DCH MAC-d Flow Specific Information* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If the E-DCH MAC-d Flow Multiplexing List for a Common E-DCH MAC-d Flow is configured in DRNC, the DRNC shall include the *E-DCH MAC-d Flow Multiplexing List* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes the *C-ID* IE and the *Common E-DCH Support Indicator* IE, the DRNC may include the *E-RNTI* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.]

[1.28Mcps TDD – If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes a *Enhanced FACH Support Indicator* IE, the DRNC may include the *Common E-DCH MAC-d Flow Specific Information LCR* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.]

If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes an *HS-DSCH physical layer category* IE, the DRNC may store the information for the considered UE Context for the lifetime of the UE Context.

[FDD – If the COMMON TRANSPORT CHANNEL RESOURES REQUEST message includes an *UE with enhanced HS-SCCH support indicator* IE, the DRNC may store the information for the considered UE Context for the lifetime of the UE context.]

# 8.4.1.3 Unsuccessful Operation

SRNC

NC	DRNO
COMMON TRANSPORT CHANNEL RESOURCES REQUEST	
COMMON TRANSPORT CHANNEL RESOURCES FAILURE	

### Figure 28: Common Transport Channel Resources Initialisation procedure, Unsuccessful Operation

If the *Transport Bearer Request Indicator* IE is set to "Bearer Requested" and the DRNC is not able to provide a Transport Bearer, the DRNC shall reject the procedure and respond to the SRNC with the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message, including the reason for the failure in the *Cause* IE.

If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message contains a *C-ID* IE corresponding to a cell reserved for operator use and the Permanent NAS UE Identity is not available for the considered UE Context, the DRNC shall reject the procedure and send the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message, including the reason for the failure in the *Cause* IE.

Typical cause values are:

### **Radio Network Layer Causes:**

- Common Transport Channel Type not Supported;
- Cell reserved for operator use.

### **Transport Layer Causes:**

- Transport Resource Unavailable.

### 8.4.1.4 Abnormal Conditions

If the COMMON TRANSPORT CHANNEL RESOURCES 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 DRNC shall reject the procedure using the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message.

If ALCAP is not used, if the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message contains the *Transport Bearer Request Indicator* IE set to "Bearer Requested" but does not contain the *Transport Layer Address* IE and the *Binding ID* IE, the DRNC shall reject the procedure using the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message.

# 8.4.2 Common Transport Channel Resources Release

# 8.4.2.1 General

This procedure is used by the SRNC to request release of Common Transport Channel Resources for a given UE in the DRNS. The SRNC uses this procedure either to release the UE Context from the DRNC (and thus both the D-RNTI and the C-RNTI) or to release only the C-RNTI.

This procedure shall use the connectionless mode of the signalling bearer.

# 8.4.2.2 Successful Operation



# Figure 29: Common Transport Channel Resources Release procedure, Successful Operation

The SRNC initiates the Common Transport Channel Resources Release procedure by sending the COMMON TRANSPORT CHANNEL RESOURCES RELEASE REQUEST message to the DRNC. Upon receipt of the message the DRNC shall release the UE Context identified by the D-RNTI and all its related RACH and/or FACH resources, unless the UE is using dedicated resources (DCH, [TDD – USCH and/or DSCH]) in the DRNS in which case the DRNC shall release only the C-RNTI and all its related RACH and/or FACH [FDD – and/or HS-DSCH] [1.28Mcps TDD – and/or HS-DSCH] resources allocated for the UE.

8.4.2.3 Abnormal Conditions

- 8.5 Global Procedures
- 8.5.1 Error Indication
- 8.5.1.1 General

The Error Indication procedure is initiated by a node to report detected errors in a received message, provided they cannot be reported by an appropriate response message.

This procedure shall use the signalling bearer mode specified below.

### 8.5.1.2 Successful Operation



Figure 30: Error Indication procedure, Successful Operation

When the conditions defined in clause 10 are fulfilled, the Error Indication procedure is initiated by an ERROR INDICATION message sent from the receiving node. This message shall use the same mode of the signalling bearer and the same signalling bearer connection (if connection oriented) as the message that triggers the procedure.

When the ERROR INDICATION message is sent from a DRNC to an SRNC using connectionless mode of the signalling bearer, the *S-RNTI* IE shall be included in the message if the UE Context addressed by the *D-RNTI* IE which was received in the message triggering the Error Indication procedure exists. When the ERROR INDICATION message is sent from an SRNC to a DRNC using connectionless mode of the signalling bearer, the *D-RNTI* IE shall be included in the message if available.

When a message using connectionless mode of the signalling bearer is received in the DRNC and there is no UE Context in the DRNC as indicated by the *D-RNTI* IE, the DRNC shall include the D-RNTI from the received message in the *D-RNTI* IE and set the *Cause* IE to "Unknown RNTI" in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

When a message using connectionless mode of the signalling bearer is received in the SRNC and there is no UE in the SRNC as indicated by the *S-RNTI* IE, the SRNC shall include the *S-RNTI* from the received message in the *S-RNTI* IE and set the *Cause* IE to "Unknown RNTI" 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 to indicate the reason for the error indication.

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.

### 8.5.1.2.1 Successful Operation for lur-g

The RNC<sub>1</sub>/BSS<sub>1</sub> and RNC<sub>2</sub>/BSS<sub>2</sub> shall use the error indication procedure as specified in section 8.5.1.2.

### 8.5.1.3 Abnormal Conditions

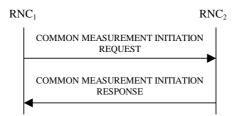
# 8.5.2 Common Measurement Initiation

### 8.5.2.1 General

This procedure is used by an RNC to request the initiation of measurements of common resources to another RNC. The requesting RNC is referred to as  $RNC_1$  and the RNC to which the request is sent is referred to as  $RNC_2$ .

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

# 8.5.2.2 Successful Operation



### Figure 30A: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the RNC<sub>1</sub> to the RNC<sub>2</sub>.

Upon receipt, the RNC<sub>2</sub> 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 [3.84 Mcps TDD and 7.68 Mcps TDD – *Time Slot* IE] [1.28 Mcps – *Time Slot LCR* IE] is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to the requested time slot individually.]

### **Common measurement type**

If the Common Measurement Type IE is set to "SFN-SFN Observed Time Difference", then:

- The RNC<sub>2</sub> shall initiate the SFN-SFN Observed Time Difference measurements between the reference cell identified by the *Reference Cell Identifier* IE and the neighbouring cells identified by the *UTRAN Cell Identifier* IE (*UC-ID*) in the *Neighbouring Cell Measurement Information* IE.
- [3.84 Mcps TDD The RNC<sub>2</sub> shall perform the measurement using the time slot specified in the *Time Slot* IE in the *Neighbouring TDD Cell Measurement Information* IE and using the midamble shift and burst type specified in the *Midamble Shift And Burst Type* IE in the *Neighbouring TDD Cell Measurement Information* IE. If *Time Slot* IE and *Midamble Shift And Burst Type* IE are not available in the *Neighbouring TDD Cell Measurement Information* IE. If *Time Slot* IE and *Midamble Shift And Burst Type* IE are not available in the *Neighbouring TDD Cell Measurement Information* IE, the RNC<sub>2</sub> may use any appropriate time slots, midamble shifts and burst types to make the measurement.]
- [7.68 Mcps TDD The RNC<sub>2</sub> shall perform the measurement using the time slot specified in the *Time Slot* IE in the *Neighbouring TDD Cell Measurement Information 7.68 Mcps* IE and using the midamble shift and burst type specified in the *Midamble Shift And Burst Type 7.68 Mcps* IE in the *Neighbouring TDD Cell Measurement Information 7.68 Mcps* IE. If *Time Slot* IE and *Midamble Shift And Burst Type 7.68 Mcps* IE are not available in the *Neighbouring TDD Cell Measurement Information 7.68 Mcps* IE are not available in the *Neighbouring TDD Cell Measurement Information 7.68 Mcps* IE, the RNC<sub>2</sub> may use any appropriate time slots, midamble shifts and burst types to make the measurement.]

If the *Common Measurement Type* IE is set to "load", the RNC<sub>2</sub> shall initiate measurements of uplink and downlink load on the measured object identified by the *Reference Cell Identifier* IE. If either uplink or downlink load satisfies the requested report characteristics, the RNC<sub>2</sub> shall report the result of both uplink and downlink measurements.

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning", "UTRAN GANSS Timing of Cell Frames for UE Positioning", "transmitted carrier power", "received total wide band power", or

"UL timeslot ISCP" the RNC<sub>2</sub> shall initiate measurements on the measured object identified by the *Reference Cell Identifier* IE.

If the *Common Measurement Type* IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning", then the RNC<sub>2</sub> 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 RNC<sub>2</sub> shall assume that the corresponding GANSS time is "Galileo" system time.

If the *Common Measurement Type* IE is set to "RT load", the RNC<sub>2</sub> shall initiate measurements of uplink and downlink estimated share of RT (Real Time) traffic of the load of the measured object. If either uplink or downlink RT load satisfies the requested report characteristics, the RNC<sub>2</sub> shall report the result of both uplink and downlink measurements.

If the *Common Measurement Type* IE is set to "NRT load Information", the RNC<sub>2</sub> shall initiate measurements of uplink and downlink NRT (Non Real Time) load situation on the measured object. If either uplink or downlink NRT load satisfies the requested report characteristics, the RNC<sub>2</sub> shall report the result of both uplink and downlink measurements.

### **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 RNC<sub>2</sub> shall report the result of the requested measurement immediately in the COMMON MEASUREMENT INITIATION RESPONSE message. 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 (TS 25.302 [26]). Furthermore, if the *SFN* IE is present and if the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference ", then the *SFN* IE relates to the Radio Frames of the Reference Cell identified by the *Reference Cell Identifier* IE.

If the *Report Characteristics* IE is set to "Periodic" and if the *SFN* IE is not provided, the RNC<sub>2</sub> shall immediately and periodically initiate a Common Measurement Reporting procedure for this measurement, with a frequency as specified by the *Report Periodicity* IE. If the *SFN* IE is provided, the RNC<sub>2</sub> shall initiate a Common Measurement Reporting procedure for this measurement at the SFN indicated in the *SFN* IE, and shall repeat this initiation periodically thereafter with a frequency as specified by the *Report Periodicity* IE. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]). Furthermore, if the *SFN* IE is present and if the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference ", then the *SFN* IE relates to the Radio Frames of the Reference Cell identified by the *Reference Cell Identifier* IE.

If the *Report Characteristics* IE is set to "Event A", the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure when the measured entity rises above the requested threshold, as specified by the *Measurement Threshold* IE, and then stays above the threshold for the requested hysteresis time, as specified by the *Measurement Hysteresis Time* IE. If the *Measurement Hysteresis Time* IE is not included, the RNC<sub>2</sub> shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event B", the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure when the measured entity falls below the requested threshold, as specified by the *Measurement Threshold* IE, and then stays below the threshold for the requested hysteresis time, as specified by the *Measurement Hysteresis Time* IE. If the *Measurement Hysteresis Time* IE is not included, the RNC<sub>2</sub> shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event C", the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure when the measured entity rises more than the requested threshold specified by the *Measurement Increase/Decrease Threshold* IE, and only when this rise occurs within the requested rising time specified by the *Measurement Change Time* IE. After reporting this type of event, the RNC<sub>2</sub> shall not initiate the next C event reporting for the same measurement during the subsequent time specified by the *Measurement Change Time* IE.

If the *Report Characteristics* IE is set to "Event D", the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure when the measured entity falls more than the requested threshold specified by the *Measurement Increase/Decrease Threshold* IE, and only when this fall occurs within the requested falling time specified by the *Measurement Change Time* IE. After reporting this type of event, the RNC<sub>2</sub> shall not initiate the next D event reporting for the same measurement during the subsequent time specified by the *Measurement Change Time* IE.

If the *Report Characteristics* IE is set to "Event E", the RNC<sub>2</sub>shall initiate the Common Measurement Reporting procedure when the measured entity rises above the *Measurement Threshold 1* IE and stays above the threshold for the *Measurement Hysteresis Time* IE (Report A). When the conditions for Report A are met and if the *Report Periodicity* IE is provided, the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure periodically with the requested report frequency specified by the *Report Periodicity* IE. If the conditions for Report A have been met and the measured entity falls below the *Measurement Threshold 2* IE and stays below the threshold for the *Measurement Hysteresis Time* IE, the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure (Report B) and shall terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the RNC<sub>2</sub> shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the RNC<sub>2</sub> 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 RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure when the measured entity falls below the *Measurement Threshold 1* IE and stays below the threshold for the *Measurement Hysteresis Time* IE (Report A). When the conditions for Report A are met and if the *Report Periodicity* IE is provided, the RNC<sub>2</sub> shall initiate the Measurement Reporting procedure periodically with the requested report frequency specified by the *Report Periodicity* IE. If the conditions for Report A have been met and the measured entity rises above the *Measurement Threshold 2* IE and stays above the threshold for the *Measurement Hysteresis Time* IE, the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure (Report B) and shall terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the RNC<sub>2</sub> shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the RNC<sub>2</sub> shall use the value zero as hysteresis times for both Report A and Report B.

[1.28Mcps TDD-If the *Report Characteristics* IE is set to "Event H" (figure B.7), the Measurement Reporting procedure (Report A) is initiated when the measurement value of measured entity rises above the *Measurement Threshold 1* and stays above the threshold for the *Measurement Hysteresis Time* ( $T_1$  in figure B.7).] The measurement value of measured entity in Report A substitutes the *Measurement Base value* for the consequent measurement reporting.

When the Report A conditions has been met and the measurement value of measured entity rises above or falls below the *Measurement Base Value* by *Measurement Fluctuation Range* (H<sub>1</sub> in figure B.7), and stays there for the *Measurement Hysteresis Time* (T<sub>h</sub> in figure B.7) counting from the beginning of every *Report Periodicity*, the Measurement Reporting procedure (Report B or Report C) is initiated. The the measurement value of measured entity in (Report B or Report C) substitutes the *Measurement Base value* for the consequent measurement reporting.

When the Report A conditions have been met and the measurement value of measured entity falls below the *Measurement Threshold 2* and stays there for the *Measurement Hysteresis Time* (T<sub>h</sub> in figure B.7), the Measurement Reporting procedure (Report D) is initiated and the reporting is terminated.]

If the *Report Characteristics* IE is set to "On Modification" and if the *SFN* IE is not provided, the RNC<sub>2</sub> shall report the result of the requested measurement immediately. If the *SFN* IE is provided, it indicates the frame for which the first 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 (TS 25.302 [26]). Furthermore, if the *SFN* IE is present and if the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the *SFN* IE relates to the Radio Frames of the Reference Cell identified by the *Reference Cell Identifier* IE. Following the first measurement report, the RNC<sub>2</sub> 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  $T_{UTRAN-GPS}$  Change Limit IE is included in the  $T_{UTRAN-GPS}$  Measurement Threshold Information IE, the RNC<sub>2</sub> shall calculate the change of  $T_{UTRAN-GPS}$  value (F<sub>n</sub>) each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]). The RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F<sub>n</sub> rises above the threshold indicated by the  $T_{UTRAN-GPS}$  Change Limit IE. The change of  $T_{UTRAN-GPS}$  value (F<sub>n</sub>) is calculated according to the following:

 $F_n=0$  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 (TS 25.302 [26]), measured at SFN<sub>n</sub>.
- M<sub>n-1</sub> is the previous measurement result received after point C in the measurement model (TS 25.302 [26]), measured at SFN<sub>n-1</sub>.
- M<sub>1</sub> is the first measurement result received after point C in the measurement model (TS 25.302 [26]), after first Common Measurement Reporting at initiation or after the last event was triggered.
- M<sub>0</sub> 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*  $T_{UTRAN-GPS}$  *Deviation Limit* IE is included in the  $T_{UTRAN-GPS}$  *Measurement Threshold Information* IE, the RNC<sub>2</sub> shall update the P<sub>n</sub> and F each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]). The RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure and set n equal to zero when F<sub>n</sub> rises above the threshold indicated by the *Predicted*  $T_{UTRAN-GPS}$  *Deviation Limit* IE. The P<sub>n</sub> and F<sub>n</sub> are calculated according to the following:

P<sub>n</sub>=b for n=0

 $\begin{array}{ll} P_n = ((a/16)*((SFN_n-SFN_{n-1})\ mod\ 4096)\ /100 + ((SFN_n-SFN_{n-1})\ mod\ 4096)*10*3.84*10^{\wedge}3*16 + P_{n-1}\ ) \\ mod\ 37158912000000\ for \qquad n > 0 \end{array}$ 

 $F_n = \min((M_n - P_n) \mod 37158912000000, (P_n - M_n) \mod 37158912000000)$  for n>0

 $P_n$  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  $T_{UTRAN-GPS}$  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<sub>n</sub> is the latest measurement result received after point C in the measurement model (TS 25.302 [26]), measured at SFN<sub>n</sub>.
- M<sub>1</sub> is the first measurement result received after point C in the measurement model (TS 25.302 [26]), after first Common Measurement Reporting at initiation or after the last event was triggered.

The  $T_{UTRAN-GPS}$  Drift Rate is determined by the RNS<sub>2</sub> in an implementation-dependent way after point B (see model of physical layer measurements in (TS 25.302 [26])).

- 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 RNC<sub>2</sub> shall calculate the change of SFN-SFN value ( $F_n$ ) each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]). The RNC<sub>2</sub> 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 absolute value of  $F_n$  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<sub>n</sub>=0 for n=0

 $[FDD - F_n = (M_n - a) \mod 614400 \text{ for } n > 0]$ 

 $[TDD - F_n = (M_n - a) \mod 40960$  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<sub>n</sub> is the latest measurement result received after point C in the measurement model (TS 25.302 [26]), measured at SFN<sub>n</sub>.
- M<sub>1</sub> is the first measurement result received after point C in the measurement model (TS 25.302 [26]), 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 RNC<sub>2</sub> shall each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]), update the  $P_n$  and  $F_n$ . The RNC<sub>2</sub> 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  $F_n$  rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The  $P_n$  and  $F_n$  are calculated according to the following:

P<sub>n</sub>=b for n=0

 $[FDD - P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \mod 4096)/100 + P_{n-1}) \mod 614400$  for n>0]

 $[FDD - F_n = min((M_n - P_n) \mod 614400, (P_n - M_n) \mod 614400)$  for n>0]

 $[TDD - P_n = ((a/16) * (15*(SFN_n - SFN_{n-1})mod \ 4096 + (TS_n - TS_{n-1}))/1500 + P_{n-1} \ ) \ mod \ 40960 \ for \ n>0]$ 

 $[TDD - F_n = min((M_n - P_n) \mod 40960, (P_n - M_n) \mod 40960)$  for n>0]

- P<sub>n</sub> 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.
- $F_n$  is the deviation of the last measurement result from the predicted SFN-SFN value ( $P_n$ ) when n measurements have been received after 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 (TS 25.302 [26]), measured at the [TDD the Time Slot TS<sub>n</sub> of] the Frame SFN<sub>n</sub>.
- M<sub>1</sub> is the first measurement result received after point C in the measurement model (TS 25.302 [26]), after first Common Measurement Reporting at initiation or after the last event was triggered.

The SFN-SFN Drift Rate is determined by the  $RNS_2$  in an implementation-dependent way after point B (see model of physical layer measurements in (TS 25.302 [26])).

- 3. If the Common Measurement Type IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning":
  - If the  $T_{UTRAN-GANSS}$  Change Limit IE is included in the  $T_{UTRAN-GANSS}$  Measurement Threshold Information IE, the RNC<sub>2</sub> shall calculate the change of  $T_{UTRAN-GANSS}$  value (F<sub>n</sub>) each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]). The RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F<sub>n</sub> rises above the threshold indicated by the  $T_{UTRAN-GANSS}$  Change Limit IE. The change of  $T_{UTRAN-GANSS}$  value (F<sub>n</sub>) is calculated according to the following:

Fn=0 for n=0

 $Fn = (GAMn - GAMn - 1) \mod 5308416000000 - ((SFNn - SFNn - 1) \mod 4096) *10*3.84*10^{3}*16 + Fn - 10^{3} + 10^{3}$ 

for n>0

- Fn is the change of the TUTRAN-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.
- GAMn is the latest GANSS measurement result received after point C in the GANSS measurement model, measured at SFNn.

- GAMn-1 is the previous GANSS measurement result received after point C in the GANSS measurement model, measured at SFNn-1.
- GAM1 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.
- GAM0 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.  $T_{UE-GANSSj}$  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  $T_{UE-GANSSj}$  shall be the antenna connector of the UE.

- If the *Predicted T<sub>UTRAN-GANSS</sub> Deviation Limit* IE is included in the *T<sub>UTRAN-GANSS</sub> Measurement Threshold Information* IE, the RNC<sub>2</sub> shall update the P<sub>n</sub> and F each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]). The RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure and set n equal to zero when F<sub>n</sub> rises above the threshold indicated by the *Predicted T<sub>UTRAN-GANSS</sub> Deviation Limit* IE. The P<sub>n</sub> and F<sub>n</sub> are calculated according to the following:

P<sub>n</sub>=b for n=0

- $P_n = ((a/16) * ((SFN_n SFN_{n-1}) \mod 4096)/100 + ((SFN_n SFN_{n-1}) \mod 4096) * 10*3.84*10^{A}3*16 + P_{n-1}) \mod 5308416000000$  for n>0
- $F_n = min((GAM_n P_n) \mod 5308416000000, (P_n GAM_n) \mod 5308416000000)$  for n>0
- P<sub>n</sub> is the predicted T<sub>UTRAN-GANSS</sub> 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<sub>UTRAN-GANSS</sub> value.
- $F_n$  is the deviation of the last measurement result from the predicted  $T_{UTRAN-GANSS}$  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<sub>n</sub> is the latest GANSS measurement result received after point C in the GANSS measurement model, measured at SFN<sub>n</sub>.
- GAM<sub>1</sub> 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  $T_{UTRAN-GANSSS}$  Drift Rate is determined by the RNS<sub>2</sub> in an implementation-dependent way after point B (see model of physical layer measurements in (TS 25.302 [26])).

If the *Report Characteristics* IE is not set to "On Demand", the  $RNC_2$  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 any more, the  $RNC_2$  shall terminate the measurement locally without reporting this to  $RNC_1$ .

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 RNC<sub>2</sub> shall initiate a Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

#### **Common measurement accuracy**

If the Common Measurement Type IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning", then the RNC<sub>2</sub> shall use the  $T_{UTRAN-GPS}$  Measurement Accuracy Class IE included in the Common Measurement Accuracy IE according to the following:

- If the *T<sub>UTRAN-GPS</sub> Measurement Accuracy Class* IE indicates "Class A", then the concerned RNC<sub>2</sub> shall perform the measurement with the highest supported accuracy within the accuracy classes A, B or C.

- If the *T<sub>UTRAN-GPS</sub> Measurement Accuracy Class* IE indicates the "Class B", then the concerned RNC<sub>2</sub> shall perform the measurements with the highest supported accuracy within the accuracy classes B and C.
- If the *T<sub>UTRAN-GPS</sub> Measurement Accuracy Class* IE indicates "Class C", then the concerned RNC<sub>2</sub> shall perform the measurements with the highest supported accuracy according to class C.

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the concerned RNC<sub>2</sub> shall initiate the SFN-SFN observed Time Difference measurements between the reference cell identified by *UC-ID* IE and the neighbouring cells identified by their UC-ID. The *Report Characteristics* IE applies to each of these measurements.

If the *Common Measurement Type* IE is set to "UTRAN GANSS Timing of Cell Frames for UE positioning", then the RNC<sub>2</sub> shall use the  $T_{UTRAN-GANSS}$  Measurement Accuracy Class IE included in the Common Measurement Accuracy IE according to the following:

- If the *T<sub>UTRAN-GANSS</sub> Measurement Accuracy Class* IE indicates "Class A", then the concerned RNC<sub>2</sub> shall perform the measurement with the highest supported accuracy within the accuracy classes A, B or C.
- If the *T<sub>UTRAN-GANSS</sub> Measurement Accuracy Class* IE indicates the "Class B", then the concerned RNC<sub>2</sub> shall perform the measurements with the highest supported accuracy within the accuracy classes B and C.
- If the *T<sub>UTRAN-GANSS</sub> Measurement Accuracy Class* IE indicates "Class C", then the concerned RNC<sub>2</sub> shall perform the measurements with the highest supported accuracy according to class C.

### **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 COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for Fn).

 $A = \frac{1}{2}(k^{2})$ -, 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.

### **Measurement Recovery Behavior:**

If the *Measurement Recovery Behavior* IE is included in the COMMON MEASUREMENT INITIATION REQUEST message, the RNC<sub>2</sub> 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 8.5.3.2.

### **Response message**

If the RNC<sub>2</sub> was able to initiate the measurement requested by RNC, it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message.

In the case in which the Report Characteristics IE is set to "On Demand" or "On Modification":

- The COMMON MEASUREMENT INITIATION RESPONSE message shall include the *Common Measurement Object Type* IE containing the measurement result. It shall also include 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".

- If the *Common Measurement Type* IE is not set to "SFN-SFN Observed Time Difference" and if the *SFN Reporting Indicator* IE is set to "FN Reporting Required", then the RNC<sub>2</sub> shall include the *SFN* IE in the COMMON MEASUREMENT INITIATION RESPONSE message,. 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 (TS 25.302 [26]). If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the *SFN Reporting Indicator* IE is ignored.
- If the Common Measurement Type IE is set to "SFN-SFN Observed Time Difference", then the RNC<sub>2</sub> shall report all the available measurements in the Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information IE, and the RNC<sub>2</sub> shall report the neighbouring cells with no measurement result available in the Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information IE. For all available measurement results, the RNC<sub>2</sub> shall include in the Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement results, the RNC<sub>2</sub> 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 RNC<sub>2</sub> 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 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 RNC<sub>2</sub> 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.

### 8.5.2.2.1 Successful Operation for lur-g

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the  $RNC_1$  to the  $BSS_2$  or from the  $BSS_1$  to the  $RNC_2/BSS_2$ .

Upon receipt, the RNC<sub>2</sub> /BSS<sub>2</sub> shall initiate the requested measurement according to the parameters given in the request.

[1.28Mcps TDD-The procedure is also initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the TDD  $RNC_1$  to the BSS<sub>2</sub> for multiple GERAN cells' measurements by allocating unique Measurement ID for each GERAN cell. Upon receipt, the BSS<sub>2</sub> shall initiate the requeted measurement according to the parameters given in the request.]

### Common measurement type on Iur-g

If the *Common Measurement Type* IE is set to "load", the RNC<sub>2</sub>/BSS<sub>2</sub> shall initiate measurements and report results as described in section 8.5.2.2.

If the *Common Measurement Type* IE is set to "RT load", the RNC<sub>2</sub>/BSS<sub>2</sub> shall initiate measurements and report results as described in section 8.5.2.2.

If the *Common Measurement Type* IE is set to "NRT load Information", the RNC<sub>2</sub>/BSS<sub>2</sub> shall initiate measurements and report results as described in section 8.5.2.2.

### **Report characteristics on Iur-g**

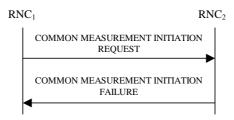
The *Report Characteristics* IE indicates how the reporting of the measurement shall be performed. This IE is used as described in section 8.5.2.2.

### **Response message for Iur-g**

If the RNC<sub>2</sub>/BSS<sub>2</sub> was able to initiate the measurement requested by RNC<sub>1</sub>/BSS<sub>1</sub> it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent. The message shall include the same Measurement ID that was used in the measurement request. Only in the case when the *Report Characteristics* IE is set to "On Demand", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result.

[1.28Mcps TDD- If the  $BSS_2$  was able to initiate the measurement requested by  $RNC_1$ , it shall respond with one or more COMMON MEASUREMENT INITIATION RESPONSE messages sent. The message(s) should include the same Measurement ID that was used in the mesasurement request.

# 8.5.2.3 Unsuccessful Operation



### Figure 30B: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the RNC<sub>2</sub> shall send a COMMON MEASUREMENT INITIATION FAILURE message. The message shall include the same *Measurement ID* IE that was used in the COMMON MEASUREMENT INITIATION REQUEST message and shall include 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.

### 8.5.2.4 Abnormal Conditions

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 RNC<sub>2</sub> 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 RNC<sub>2</sub> shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the COMMON MEASUREMENT INITIATION REQUEST message contains the  $T_{UTRAN-GANSS}$  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 RNC<sub>2</sub> shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

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 RNC<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

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 RNC<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the Common Measurement Type received in the *Common Measurement Type* IE is not "load", "RT load" or "NRT load Information", and if the Common Measurement Type received in the *Common Measurement Type* IE is not defined in TS 25.215 [11] or TS 25.225 [14] to be measured on the Common Measurement Object Type indicated in the COMMON MEASUREMENT INITIATION REQUEST message the RNC<sub>2</sub> shall reject the Common Measurement Initiation 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 RNC<sub>2</sub> shall reject the Common Measurement Initiation 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 RNC<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

Common measurement type		Report characteristics type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	Event-H	On Modification
Received total wide band power	Х	Х	Х	Х	Х	Х	Х	Х		
Transmitted Carrier Power	Х	Х	Х	Х	Х	Х	Х	Х		
UL Timeslot ISCP	Х	Х	Х	Х	Х	Х	Х	Х		
Load	Х	Х	Х	Х	Х	Х	Х	Х	Х	
UTRAN GPS Timing of Cell Frames for UE Positioning	Х	X								Х
SFN-SFN Observed Time Difference	Х	Х								Х
RT load	Х	Х	Х	Х	Х	Х	Х	Х		
NRT load Information	Х	Х	Х	Х	Х	Х	Х	Х		
UpPTS interference	X X	X X	Х	Х	Х	Х	Х	Х		
UTRAN GANSS Timing of Cell Frames for UE Positioning	Х	X								Х

### Table 5: Allowed Common Measurement Type and Report Characteristics Type Combinations

[TDD – If the Common Measurement Type requires the Time Slot Information but the [3.84Mcps TDD and 7.68 Mcps TDD – *Time Slot IE*] [1.28Mcps TDD – *Time Slot LCR* IE] is not provided in the COMMON MEASUREMENT INITIATION REQUEST message the RNS<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.]

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 RNS<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

### 8.5.2.4.1 Abnormal Conditions for lur-g

The measurements which can be requested on the Iur and Iur-g interfaces are shown in the table below marked with "X".

Common Measurement Type	Interface		
	lur	lur-g	
Received total wide band power	Х		
Transmitted Carrier Power	Х		
UL Timeslot ISCP	Х		
Load	Х	Х	
UTRAN GPS Timing of Cell	Х		
Frames for LCS			
SFN-SFN Observed Time	Х		
Difference			
RT load	Х	Х	
NRT load Information	Х	Х	
UTRAN GANSS Timing of Cell	Х		
Frames for UE Positioning			

### Table 6: Allowed Common measurement type on lur and lur-g interfaces

If the RNC<sub>2</sub> receives from the BSS<sub>1</sub> a COMMON MEASUREMENT INITIATION REQUEST message in which a measurement, which is not applicable on the Iur-g interface, is requested, the RNC<sub>2</sub> shall reject the Common Measurement Initiation procedure.

If the  $BSS_2$  receives from the  $BSS_1 / RNC_1$  a COMMON MEASUREMENT INITIATION REQUEST message in which a measurement, which is not applicable on the Iur-g interface, is requested, the  $BSS_2$  shall reject the Common Measurement Initiation procedure.

If the RNC<sub>2</sub> receives from the BSS<sub>1</sub> a COMMON MEASUREMENT INITIATION REQUEST message in which the *SFN reporting indicator* IE is set to "FN Reporting Required", the RNC<sub>2</sub> shall ignore that IE.

If the BSS<sub>2</sub> receives from the BSS<sub>1</sub> / RNC<sub>1</sub> a COMMON MEASUREMENT INITIATION REQUEST message in which the *SFN reporting indicator* IE is set to "FN Reporting Required", the BSS<sub>2</sub> shall ignore that IE.

The allowed combinations of the Common measurement type and Report characteristics type are shown in the table in section 8.5.2.4 marked with "X". For not allowed combinations, the RNC<sub>2</sub>/BSS<sub>2</sub> shall reject the Common Measurement Initiation procedure.

# 8.5.3 Common Measurement Reporting

### 8.5.3.1 General

This procedure is used by an RNC to report the result of measurements requested by another RNC using the Common Measurement Initiation.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

### 8.5.3.2 Successful Operation



### Figure 30C: Common Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure. 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  $RNC_1$  when initiating the measurement with the Common Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see TS 25.133 [23] and TS 25.123 [24]) 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 RNC<sub>2</sub> was configured to perform the Measurement Recovery Behavior, the RNC<sub>2</sub> shall indicate Measurement Available to the RNC<sub>1</sub> when the achieved measurement accuracy again fulfils the given accuracy requirement (see TS 25.133 [23] and TS 25.123 [24]) 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 RNC<sub>2</sub> 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<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure was "UTRAN GPS Timing of Cell Frames for UE Positioning", then the RNC<sub>2</sub> 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<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure was "UTRAN GANSS Timing of Cell Frames for UE Positioning", then the RNC<sub>2</sub> 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.

### 8.5.3.2.1 Successful Operation for lur-g

If the requested measurement reporting criteria are met, the  $RNC_2/BSS_2$  shall initiate a Measurement Reporting procedure. Unless specified below, the meaning of the parameters are given in other specifications.

The *Common Measurement ID* IE shall be set to the Common Measurement ID provided by RNC<sub>1</sub>/BSS<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure.

If the Common measurement type provided by RNC<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure was "SFN-SFN Observed Time Difference", then RNC<sub>2</sub> shall include in the COMMON MEASUREMENT REPORT all the available measurements in the *Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE and shall include the neighbouring cells with no measurement result available in the *Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE.

If the Common measurement type provided by RNC<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure was not set to "SFN-SFN Observed Time Difference" and the SFN Reporting Indicator when initiating the measurement was set to "FN Reporting Required", the RNC<sub>2</sub> shall include the *SFN* IE in the COMMON MEASUREMENT REPORT message. 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 (TS 25.302 [26]). If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the *SFN Reporting Indicator* IE is ignored.

# 8.5.3.3 Abnormal Conditions

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# 8.5.4 Common Measurement Termination

# 8.5.4.1 General

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

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

# 8.5.4.2 Successful Operation



### Figure 30D: Common Measurement Termination procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT TERMINATION REQUEST message.

Upon receipt,  $RNC_2$  shall terminate reporting of common measurements corresponding to the received *Measurement ID* IE.

### 8.5.4.2.1 Successful Operation for lur-g

The  $RNC_1/BSS_1$  and  $RNC_2/BSS_2$  shall use the Common Measurement Termination procedure as specified in section 8.5.4.2.

# 8.5.4.3 Abnormal Conditions

# 8.5.5 Common Measurement Failure

### 8.5.5.1 General

This procedure is used by an RNC to notify another RNC that a measurement previously requested by the Common Measurement Initiation procedure can no longer be reported.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

### 8.5.5.2 Successful Operation



### Figure 30E: Common Measurement Failure procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT FAILURE INDICATION message, sent from RNC<sub>2</sub> to RNC<sub>1</sub> to inform the RNC<sub>1</sub> that a previously requested measurement can no longer be reported. RNC<sub>2</sub> has locally terminated the indicated measurement. The RNC<sub>2</sub> shall include in the COMMON MEASUREMENT FAILURE INDICATION message the reason for the failure in the *Cause* IE.

### 8.5.5.2.1 Successful Operation for lur-g

The RNC<sub>1</sub>/BSS<sub>1</sub> and RNC<sub>2</sub>/BSS<sub>2</sub> shall use the Common Measurement Failure procedure as specified in section 8.5.5.2.

### 8.5.5.3 Abnormal Conditions

### -

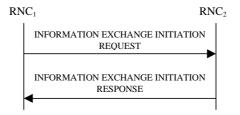
# 8.5.6 Information Exchange Initiation

# 8.5.6.1 General

This procedure is used by an RNC to request the initiation of an information exchange with another RNC.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

# 8.5.6.2 Successful Operation



### Figure 30F: Information Exchange Initiation procedure, Successful Operation

The procedure is initiated with an INFORMATION EXCHANGE INITIATION REQUEST message sent from RNC<sub>1</sub> to RNC<sub>2</sub>.

Upon receipt, the  $RNC_2$  shall provide the requested information according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

If the *Information Exchange Object Type* is set to "MBMS Bearer Service" and the *Information Type Item* IE is set to "MBMS Bearer Service Full Address", the RNC<sub>2</sub> shall report for each TMGI included in the received *MBMS Bearer Service Identifiers List* IE, the Access Point Name and the IP Multicast Address corresponding to this TMGI in the *MBMS Bearer Service Identifiers List* IE in the INFORMATION EXCHANGE INITIATION RESPONSE message.

[FDD – If the *Information Exchange Object Type* is set to "MBMS Bearer Service in MBMS Cell" and the *Information Type Item* IE is set to "MBMS Counting Information", the RNC<sub>2</sub> shall perform counting in cells as defined in TS 25.346 [50] and report in the *Counting Result* IE for each TMGI included in the received *MBMS Bearer Service Identifiers List* IE for each cell included in the received *MBMS Cell List* IE either the counting information or, if relevant counting information is not available in RNC<sub>2</sub> (TS 25.346 [50]), the value "0" in the INFORMATION EXCHANGE INITIATION RESPONSE message.]

[FDD – If the *Information Exchange Object Type* is set to "MBMS Bearer Service in MBMS Cell" and the *Information Type Item* IE is set to "MBMS Transmission Mode", the RNC<sub>2</sub> shall report for each TMGI included in the received *MBMS Bearer Service Identifiers List* IE for each cell included in the received *MBMS Cell List* IE, the transmission mode for each TMGI in the cells of RNC<sub>2</sub> that have a neighbour relation to the cells received in *MBMS Cell List* IE as defined in TS 25.346 [50] in the INFORMATION EXCHANGE INITIATION RESPONSE message. If no cells of RNC<sub>2</sub> have a neighbour relation to a cell received in *MBMS Cell List* IE for a TMGI the value "Not Provided" shall be used.]

[FDD – If the *Information Exchange Object Type* is set to "MBMS Cell" and the *Information Type Item* IE is set to "MBMS Neighbouring Cell Information", the RNC<sub>2</sub> shall report for each cell included in the received *MBMS Cell List* IE, the MBMS radio bearer information for each cells in the INFORMATION EXCHANGE INITIATION RESPONSE message.]

[FDD – If the *Information Exchange Object Type* is set to "MBMS Bearer Service in MBMS Cell" and the *Information Type Item* IE is set to "MBMS RLC Sequence Number", the RNC<sub>2</sub> shall report for each TMGI included in the received *MBMS Bearer Service Identifiers List* IE for each cell included in the received *MBMS Cell List* IE, the RLC sequence number for each TMGI for the indicated cells in the INFORMATION EXCHANGE INITIATION RESPONSE message.]

If the *Information Exchange Object Type* is set to "ANR Cell" and the *Information Type Item* IE is set to "ANR Cell Information", the RNC<sub>2</sub> shall, if supported, for each cell in the *ANR Cell List* IE that is controlled by RNC<sub>2</sub>, report the ANR Cell Information in the INFORMATION EXCHANGE INITIATION RESPONSE message.

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 RNC<sub>2</sub> shall assume that the corresponding GANSS is "Galileo".

If the *Information Exchange Object Type* IE is set to "Common E-RGCH Cell" and the *Information Type Item* IE is set to "Common E-RGCH Cell Information", the RNC<sub>2</sub> shall, for each Common E-RGCH capable cell in the *Common E-RGCH Cell List* IE that is controlled by RNC<sub>2</sub>, report the Common E-RGCH Cell Information in the INFORMATION EXCHANGE INITIATION RESPONSE message.

### **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 RNC<sub>2</sub> shall report the requested information immediately.

If the *Information Report Characteristics* IE is set to "Periodic", the RNC<sub>2</sub> shall report the requested information immediately and then shall periodically initiate the Information Reporting procedure for all the requested information, with the report frequency indicated by the *Information Report Periodicity* IE.

If the *Information Report Characteristics* IE is set to "On Modification", the RNC<sub>2</sub> shall report the requested information immediately 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 RNC<sub>2</sub> shall initiate the Information Reporting procedure when the requested information becomes available. The RNC<sub>2</sub> shall then initiate the Information Reporting procedure in accordance to the following conditions:

- If the *Information Type Item* IE is set to "IPDL Parameters", the RNC<sub>2</sub> shall initiate the Information Reporting procedure when any change in the parameters occurs.
- If the *Information Type Item* IE is set to "DGPS Corrections", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific Information Type 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.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Navigation Model & Recovery Assistance", the RNC<sub>2</sub> 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.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Ionospheric Model", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- If the Information Type Item IE is set to "GPS Information" and the GPS Information Item IE includes "GPS UTC Model", the RNC<sub>2</sub> 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.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Almanac", the RNC<sub>2</sub> 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.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Real-Time Integrity", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- If the *Information Type* IE is set to "Cell Capacity Class", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for uplink and downlink cell capacity class when any change has occurred. If either uplink or downlink cell capacity class satisfies the requested report characteristics, the RNC<sub>2</sub> shall report the result of both uplink and downlink cell capacity information.
- If any of the above *Information Type* IEs becomes temporarily unavailable, the RNC<sub>2</sub> 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 RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific Information.
- If the *Information Type* IE is set to "NACC related data", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for NACC related data if any change has occurred.
- If the *Information Type* IE is set to "Inter-frequency Cell Information", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific Information Item when any change has occurred to the inter-frequency cell information broadcasted in the SIB11 or SIB12.
- If the *Information Type Item* IE is set to "DGANSS Corrections", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific Information Type 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.
- 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 RNC<sub>2</sub> 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.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Ionospheric Model* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information Item when any change has occurred.

- If the Information Type Item IE is set to "GANSS Information" and the GANSS Information IE includes the GANSS UTC Model IE, the RNC<sub>2</sub> 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.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Almanac* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information Item when a change in the T<sub>oa</sub>, IOD<sub>a</sub>, or Week Number parameter has occurred.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Real Time Integrity* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information Item when any change has occurred.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Data Bit Assistance* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information Item when any change has occurred.
- If the *Information Type Item* IE is set to "MBMS Transmission Mode", the RNC<sub>2</sub> shall initiate the Information Reporting procedure when any change in the parameter occurs.
- If the *Information Type Item* IE is set to "MBMS Neighbouring Cell Information", the RNC<sub>2</sub> shall initiate the Information Reporting procedure when any change in the parameters occurs.
- 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 RNC<sub>2</sub> 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.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional Ionospheric Model* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional UTC Models* IE, the RNC<sub>2</sub> 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.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Earth Orientation Parameters* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t<sub>EOP</sub> parameter.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Auxiliary Information* IE, the RNC<sub>2</sub> 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.
- If the *Information Type Item* IE is set to "Common E-RGCH Cell Information", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this Common E-RGCH Information item when a change has occurred in the *Common E-RGCH Cell Information* IE parameter for the specific cell.

### **Response message:**

If the RNC<sub>2</sub> is able to determine the information requested by the RNC<sub>1</sub>, it shall respond with the INFORMATION EXCHANGE INITIATION RESPONSE message. The message shall include the *Information Exchange ID* IE set to the same value that was included in the INFORMATION EXCHANGE INITIATION REQUEST message. When the *Report Characteristics* IE is set to or "On Modification" or "Periodic", the INFORMATION EXCHANGE INITIATION RECHANGE INITIATION RESPONSE message shall contain the *Requested Data Value* IE 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 TS 25.331 [16], 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 [53], IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], DTFA01-96-C-00025 [58], IS-QZSS [59], [60]).

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 RNC<sub>2</sub> 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 RNC<sub>2</sub> shall include the *GANSS Additional Time Models* IE in *Requested Data Value* IE with the requested time information for each GANSS.

If the *Information Type Item* IE is set to "DGPS Corrections", the RNC<sub>2</sub> shall include the *DGPS Corrections* IE in *Requested Data Value* IE with the *DGNSS Validity Period* IE included, if available.

If the *Information Type Item* IE is set to "DGANSS Corrections", the RNC<sub>2</sub> shall include the *DGANSS Corrections* IE in *Requested Data Value* IE with the *DGNSS Validity Period* IE included, if available.

If the *Information Type Item* IE is set to "GPS Almanac", the RNC<sub>2</sub> shall include the *GPS Almanac* IE in *Requested Data Value* IE with the *Complete Almanac Provided* IE included, if available.

If the *Information Type Item* IE is set to "GANSS Almanac", the RNC<sub>2</sub> shall include the *GANSS Almanac* IE in *Requested Data Value* IE with the *Complete Almanac Provided* IE included, if available.

If the *Information Type Item* IE is set to "GANSS Time Model GNSS-GNSS", the RNC<sub>2</sub> shall include the GANSS Time Model IE in Requested Data Value IE with the Delta\_T IE included, if available.

### 8.5.6.2.1 Successful Operation for lur-g

The procedure is initiated with an INFORMATION EXCHANGE INITIATION REQUEST message sent from BSS<sub>1</sub> to BSS<sub>2</sub>/RNC<sub>2</sub> or by RNC<sub>1</sub> to BSS<sub>2</sub>.

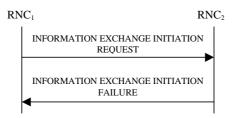
Upon receipt, the  $BSS_2/RNC_2$  shall provide the requested information according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

### Information Report Characteristics on Iur-g:

If the *Information Type Item* IE is set to "Cell Capacity Class", the RNC<sub>2</sub>/BSS<sub>2</sub> shall initiate measurements and report results as described in section 8.5.6.2.

The *Information Report Characteristics* IE indicates how the reporting of the information shall be performed. This IE is used as described in section 8.5.6.2.

# 8.5.6.3 Unsuccessful Operation



### Figure 30G: Information Exchange Initiation procedure, Unsuccessful Operation

If the requested Information Type received in the *Information Type* IE indicates a type of information that RNC<sub>2</sub> cannot provide, the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure.

If the requested information provision cannot be accessed, the RNC<sub>2</sub> shall reject the procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

The message shall include the *Information Exchange ID* IE set to the same value 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.

### 8.5.6.4 Abnormal Conditions

If the *Information Report Characteristics* IE is set to "On Modification", and the *Information Type Item* IE is set to "DGPS Corrections", but the *Information Threshold* IE is not received in the INFORMATION EXCHANGE INITIATION REQUEST message, the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

If the *Information Exchange Object Type* IE is set to a value other than "GSM Cell" and the *Information Type Item* IE set to "NACC related data" the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

If the *Information Type Item* IE is set to the value "MBMS Bearer Service Full Address" and the *Information Exchange Object Type* IE is not set to "MBMS Bearer Service", the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

If the *Information Type Item* IE is set to the value "ANR Cell Information" and the *Information Exchange Object Type* IE is not set to "ANR Cell", the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

If the *Information Type Item* IE is set to the value "ANR Cell Information" and the *Information Exchange Object Type* IE is set to "ANR Cell", but the RNC<sub>2</sub> can only collect the "Requested Data Value" for the subset of the cells requested, RNC<sub>2</sub> shall not reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION RESPONSE message with the information it could obtain.

If the *Information Type Item* IE is set to the value "Common E-RGCH Cell Information" and the *Information Exchange Object Type* IE is not set to "Common E-RGCH Cell", the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

If the *Information Type Item* IE is set to the value "Common E-RGCH Cell Information" and the *Information Exchange Object Type* IE is set to "Common E-RGCH Cell", but only the subset of the cells requested are Common E-RGCH capable, the RNC<sub>2</sub> shall not reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION RESPONSE message with the information it could obtain.

The allowed combinations of the Information type and Information Report Characteristics type are shown in the table below marked with "X". For not allowed combinations, the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure using the INFORMATION EXCHANGE INITIATION FAILURE message.

### Table 6a: Allowed Information Type and Information Report Characteristics type combinations

Туре	Information Report Characteristics Type					
	On Demand	Periodic	On Modification			
UTRAN Access Point Position with	Х					
Altitude Information						
UTRAN Access Point Position	Х					
IPDL Parameters	Х	Х	Х			
GPS Information	Х	Х	Х			
DGPS Corrections	Х	Х	Х			
GPS RX Pos	Х					
SFN-SFN Measurement Reference Point	Х					
Position						
Cell Capacity Class	Х		Х			
NACC related data	Х		Х			
MBMS Bearer Service Full Address	Х					
Inter-frequency Cell Information	Х		Х			
GANSS Information	Х	Х	Х			
DGANSS Corrections	Х	Х	Х			
GANSS RX Pos	Х					
MBMS Counting Information [FDD only]	Х					
MBMS Transmission Mode [FDD only]			Х			
MBMS Neighbouring Cell Information	Х		Х			
[FDD only]						
MBMS RLC Sequence Number	Х					
[FDD only]						
ANR Cell Information	Х					
Common E-RGCH Cell Information	Х		Х			

#### 8.5.6.4.1 Abnormal Conditions for lur-g

The information types that can be requested on the Iur and Iur-g interfaces are shown in the table below marked with "X". For information types that are not applicable on the Iur-g interface, the BSS shall reject the Information Exchange Initiation procedure.

Information Type	Inte	rface
	lur	lur-g
	N N	

Table 7: Allowed Information types on lur and lur-g interfaces

Information Type	Inter	rface
	lur	lur-g
UTRAN Access Point Position with Altitude Information	Х	
UTRAN Access Point Position	Х	
IPDL Parameters	X	
DGPS Corrections	Х	
GPS Information	Х	
GPS RX Pos	Х	
SFN-SFN Measurement Reference Point Position	Х	
Cell Capacity Class	Х	Х
NACC related data	Х	
MBMS Bearer Service Full Address	Х	
Inter-frequency Cell Information	Х	
DGANSS Corrections	Х	
GANSS Information	Х	
GANSS RX Pos	Х	
MBMS Counting Information [FDD only]	Х	
MBMS Transmission Mode [FDD only]	Х	
MBMS Neighbouring Cell Information [FDD only]	Х	
MBMS RLC Sequence Number [FDD only]	Х	

# 8.5.7 Information Reporting

### 8.5.7.1 General

This procedure is used by a RNC to report the result of information requested by another RNC using the Information Exchange Initiation.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

# 8.5.7.2 Successful Operation



### Figure 30H: Information Reporting procedure, Successful Operation

If the requested information reporting criteria are met, the  $RNC_2$  shall initiate an Information Reporting procedure. 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  $RNC_1$  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.

# 8.5.7.2.1 Successful Operation for lur-g

The RNC<sub>1</sub>/BSS<sub>1</sub> and RNC<sub>2</sub>/BSS<sub>2</sub> shall use the Information Reporting procedure as specified in section 8.5.7.2.

# 8.5.7.3 Abnormal Conditions

# 8.5.8 Information Exchange Termination

# 8.5.8.1 General

This procedure is used by a RNC to terminate the information exchange requested using the Information Exchange Initiation.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

# 8.5.8.2 Successful Operation



### Figure 30I: Information Exchange Termination procedure, Successful Operation

This procedure is initiated with a INFORMATION EXCHANGE TERMINATION REQUEST message.

Upon receipt, the  $RNC_2$  shall terminate the information exchange corresponding to the *Information Exchange ID* IE provided by the  $RNC_1$  when initiating the information exchange with the Information Exchange Initiation procedure.

# 8.5.8.2.1 Successful Operation for lur-g

The  $RNC_1/BSS_1$  and  $RNC_2/BSS_2$  shall use the Information Exchange Termination procedure as specified in section 8.5.8.2.

# 8.5.8.3 Abnormal Conditions

# 8.5.9 Information Exchange Failure

# 8.5.9.1 General

This procedure is used by a RNC to notify another that the information exchange it previously requested using the Information Exchange Initiation can no longer be reported.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

# 8.5.9.2 Successful Operation



# Figure 30J: Information Exchange Failure procedure, Successful Operation

This procedure is initiated with a INFORMATION EXCHANGE FAILURE INDICATION message, sent from the  $RNC_2$  to the  $RNC_1$ , to inform the  $RNC_1$  that information previously requested by the Information Exchange Initiation procedure can no longer be reported. The  $RNC_2$  shall include in the INFORMATION EXCHANGE FAILURE INDICATION message the *Information Exchange ID* IE set to the same value provided by the  $RNC_1$  when initiating the information exchange with the Information Exchange Initiation procedure, and the  $RNC_2$  shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

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

Information temporarily not available.

# 8.5.9.2.1 Successful Operation for lur-g

The  $RNC_1/BSS_1$  and  $RNC_2/BSS_2$  shall use the Information Exchange Failure procedure as specified in section 8.5.9.2.

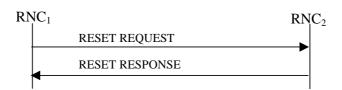
# 8.5.10 Reset

# 8.5.10.1 General

The purpose of the reset procedure is to align the resources in RNC<sub>1</sub> and RNC<sub>2</sub> in the event of an abnormal failure.

The procedure uses connectionless signalling.

### 8.5.10.2 Successful Operation



### Figure 30K: Reset procedure, Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the RNC<sub>1</sub> to the RNC<sub>2</sub>.

If the Reset Indicator IE is set to "Context", then:

- For all indicated UE Contexts identified by the *S-RNTI* IE, the RNC<sub>2</sub> in the role of DRNC, shall remove all the indicated UE Contexts and all the radio resources allocated for these UE Contexts. In addition, the RNC<sub>2</sub> shall take actions according to Annex D.2.
- For all indicated UE Contexts identified by the *D-RNTI* IE, the RNC<sub>2</sub> in the role of SRNC, shall remove the information related to the RNC<sub>1</sub> for all indicated UE Contexts and the radio resources allocated for these UE Contexts.

If the Reset Indicator IE is set to "Context Group", then:

- For all indicated UE Context Groups identified by the *S-RNTI Group* IE, the RNC<sub>2</sub> in the role of DRNC, shall remove all the indicated UE Contexts and all the radio resources allocated for these UE Contexts. In addition, the RNC<sub>2</sub> shall take actions according to Annex D.2.

If the *Reset Indicator* IE is set to "All Contexts", then the RNC<sub>2</sub> shall:

- In the role of DRNC, remove all the UE Contexts for which the RNC<sub>1</sub> is the SRNC and all the radio resources allocated for these UE Contexts. In addition, the RNC<sub>2</sub> shall take actions according to Annex D.2.
- In the role of SRNC, remove the information related to the RNC<sub>1</sub> for all the UE Contexts and all the radio resources allocated for these UE Contexts.

For all the removed UE Contexts and for all the UE Contexts for which the  $RNC_2$  has removed information related to the  $RNC_1$ , the  $RNC_2$  shall also initiate release of the dedicated or common user plane resources that were involved in these UE Contexts. After clearing all related resources, the  $RNC_2$  shall return the RESET RESPONSE message to the  $RNC_1$ .

### 8.5.10.3 Abnormal Conditions

If the RESET message is received, any other ongoing procedure (except another Reset procedure) on same Iur interface related to a context indicated explicitly or implicitly in the message shall be aborted.

# 8.5.11 Direct Information Transfer

# 8.5.11.1 General

This procedure is used by an RNC to transfer information to another RNC spontaneously.

This procedure shall use the connectionless mode of signalling bearer.

### 8.5.11.2 Successful Operation



### Figure 30L: Direct Information Transfer procedure, Successful Operation

The procedure is initiated with an DIRECT INFORMATION TRANSFER message sent from RNC1 to RNC2.

If the initiating RNC of this procedure is RNC<sub>1</sub>, RNC<sub>1</sub> shall provide appropriate information in the *Provided Information* IE.

### **MBMS** Channel Type Indication:

At the start time of a session for an MBMS bearer service, if the RNC<sub>1</sub> is in the DRNC role for some Ues whose UE Link contains the concerned MBMS bearer service and whose SRNC is  $RNC_2$  and if the channel type is determined by the RNC<sub>1</sub> for certain cells in the DRNS, the procedure shall be initiated by the RNC<sub>1</sub> to the RNC<sub>2</sub>. In this case, the RNC<sub>1</sub> shall include in the *Provided Information* IE the *Channel Type Information* IE in the DIRECT INFORMATION TRANSFER message.

During a session of an MBMS bearer service, if the RNC<sub>1</sub> is in the DRNC role for some Ues whose UE Link contains the concerned MBMS bearer service and whose SRNC is  $RNC_2$ , then the  $RNC_1$  may initiate this procedure to indicate channel type change for the MBMS bearer service in certain cells. In this case, the  $RNC_1$  shall include in the *Provided Information* IE the *Channel Type Information* IE in the DIRECT INFORMATION TRANSFER message.

The RNC<sub>1</sub> shall include the available information within the *PTM Cell List* IE, the *PTP Cell List* IE and/or the *Not Provided Cell List* IE in the *Channel Type Information* IE.

### **MBMS Preferred Frequency Layer Indication:**

At the start time of a session for an MBMS bearer service, if the RNC<sub>1</sub> is in the DRNC role for at least one CELL\_DCH UE whose UE Link contains the concerned MBMS bearer service and whose SRNC is RNC<sub>2</sub> and if the preferred frequency layer is determined by the RNC<sub>1</sub> for certain cells that host at least one of these CELL\_DCH Ues whose SRNC is RNC<sub>2</sub>, the procedure shall be initiated by the RNC<sub>1</sub> to the RNC<sub>2</sub>. In this case, the RNC<sub>1</sub> shall include in the *Provided Information* IE the *Preferred Frequency Layer Information* IE in the DIRECT INFORMATION TRANSFER message.

If some of the cells controlled by RNC<sub>1</sub> that host at least one of these CELL\_DCH Ues whose SRNC is RNC<sub>2</sub> are configured with different preferred frequencies, the *Additional Preferred Frequency* IE as well as *Default Preferred Frequency* IE shall be included in the *Preferred Frequency Layer Information* IE. In this case, for each preferred frequency different from the *Default Preferred Frequency* IE, one *Additional Preferred Frequency* IE shall be included containing at least one *Corresponding Cells* IE.

### **ANR Report Indication:**

The message contains *ANR Report Indication* IE if the initiating RNC (RNC<sub>1</sub>) has decided to forward a logged ANR report received over Uu to RNC<sub>2</sub>. On reception of the *ANR Report Indication* IE, RNC2 may use the information to configure neighbour relations.

# 8.5.12 Information Transfer Control

### 8.5.12.1 General

This procedure is used by an RNC to control transfer of information (e.g. log information related to ANR) from an RNC to any other RNC. This procedure is initiated by an RNC to suspend or resume transfer of information.

This procedure shall use the connectionless mode of signalling bearer.

# 8.5.12.2 Successful Operation



### Figure 30M: Information Transfer Control procedure, Successful Operation

The RNC<sub>1</sub> initiates the procedure by sending the INFORMATION TRANSFER CONTROL REQUEST message to the RNC<sub>2</sub>.

The *Control Type* IE within the INFORMATION TRANSFER CONTROL REQUEST message shall be used to either suspend or to resume (respectively indicated by *Suspension* IE or *Resume* IE in *Control Type* IE) the transfer of information for the specified scope of objects indicated by *Controlled Object Scope* IE.

If the control of information transfer is intended for individual cells, those cells shall be indicated in the *UMTS Cell Information* IE within the *Controlled Object Scope* IE. If the *UMTS Cell Information* IE is not included, the procedure is intended for the whole entity indicated in *RNC-ID* IE or *Extended RNC-ID* IE. In shared network configurations, PLMN identities shall be indicated with *Multiple PLMN List* IE.

8.5.12.3 Abnormal Conditions

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# 8.6 MBMS Procedures

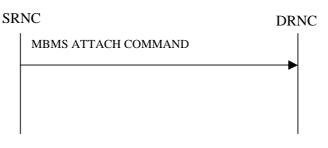
# 8.6.1 MBMS Attach

### 8.6.1.1 General

The MBMS Attach procedure is used by the SRNC to either create a UE Link/URA Link in the DRNC or inform the DRNC about any addition of one or several MBMS bearer services in an already stored UE Link or URA Link.

This procedure shall use the signalling bearer mode specified below.

# 8.6.1.2 Successful Operation



### Figure 31: MBMS Attach procedure, Successful Operation

The SRNC initiates the procedure by sending the message MBMS ATTACH COMMAND message to the DRNC.

When the UE is utilising one or more radio links in the DRNC, the message shall be sent using the connection oriented service of the signalling bearer and no further identification of the UE Context in the DRNC is required. If the UE is not utilising any radio link, the message shall be sent using the connectionless service of the signalling bearer.

If no *UE State* IE is included in the message or the *UE State* IE is set to "CELL\_FACH/CELL\_PCH", the DRNC shall perform the UE Linking as specified in TS 25.346 [50], section 5.1.6.

If the *UE State* IE is set to "URA\_PCH", the DRNC shall perform the URA Linking as specified in TS 25.346 [50], section 5.1.10.

### 8.6.1.3 Abnormal Conditions

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# 8.6.2 MBMS Detach

### 8.6.2.1 General

The MBMS Detach procedure is used by the SRNC to either delete a UE Link/URA Link in the DRNC or to inform DRNC about any removal of one or several MBMS bearer services in an already stored UE link or URA Link.

This procedure shall use the signalling bearer mode specified below.

### 8.6.2.2 Successful Operation



Figure 32: MBMS Detach procedure, Successful Operation

The SRNC initiates the procedure by sending the message MBMS DETACH COMMAND message to the DRNC.

When the UE is utilising one or more radio links in the DRNC, the message shall be sent using the connection oriented service of the signalling bearer and no further identification of the UE Context in the DRNC is required. If the UE is not utilising any radio link, the message shall be sent using the connectionless service of the signalling bearer.

If no *UE State* IE is included in the message or the *UE State* IE is set to "CELL\_FACH/CELL\_PCH", the DRNC shall perform the UE De-linking as specified in TS 25.346 [50], section 5.1.6.

If the *UE State* IE is set to "URA\_PCH", the DRNC shall perform the URA De-linking as specified in TS 25.346 [50], section 5.1.10.

### 8.6.2.3 Abnormal Conditions

# 9 Elements for RNSAP Communication

# 9.1 Message Functional Definition and Content

# 9.1.1 General

This subclause defines the structure of the messages required for the RNSAP protocol 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, in which the tabular format shall take precedence.

NOTE: The messages have been defined in accordance to the guidelines specified in TR 25.921 [28].

# 9.1.2 Message Contents

### 9.1.2.1 Presence

An information element can be of the following types:

М	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 I shall be included in a message only if the condition is satisfied. Otherwise the IE shall not be included.

In the 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. Each group may be also repeated within one message. 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 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/IE groups.

# 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 RADIO LINK SETUP REQUEST

# 9.1.3.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
SRNC-ID	M		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	YES	reject
S-RNTI	М		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	reject
D-RNTI	0		9.2.1.24		YES	reject
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL DPCH Information		1			YES	reject
>UL Scrambling Code	М		9.2.2.53		_	
>Min UL Channelisation Code Length	M		9.2.2.25		-	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.24		-	
>Puncture Limit	M		9.2.1.46	For the UL.	_	
>TFCS	M		9.2.1.63		_	
>UL DPCCH Slot Format	M		9.2.2.52		_	
>Uplink SIR Target	0		Uplink SIR 9.2.1.69		-	
>Diversity mode	М		9.2.2.8		_	
>Not Used	0		NULL			
>Not Used	0		NULL			
>DPC Mode	0		9.2.2.12A		YES	reject
>UL DPDCH Indicator for E- DCH operation	0		9.2.2.52A	This IE may be present without the presence of the <i>E-DPCH</i> <i>Information</i> IE.	YES	reject
DL DPCH Information		01			YES	reject
>TFCS	М	-	9.2.1.63		_	
>DL DPCH Slot Format	М		9.2.2.9		_	
>Number of DL	M		9.2.2.9 9.2.2.26A			
Channelisation Codes			J.Z.Z.Z0A		_	
>TFCI Signalling Mode	M		9.2.2.46			
>TFCI Signalling Mode >TFCI Presence	C-		9.2.2.46		_	
Multiploxing Desition	SlotFormat		0.0.0.00			
>Multiplexing Position	М	4	9.2.2.26			
>Power Offset Information	N4	1	Dec	D	_	
>>PO1	М		Power Offset 9.2.2.30	Power offset for the TFCI bits.	-	

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	-		2
>>PO2	М		Power Offset 9.2.2.30	Power offset for the TPC bits.	-	
>>PO3	М		Power Offset	Power offset for the pilot	_	
>FDD TPC Downlink Step Size	M		9.2.2.30 9.2.2.16	bits.	_	
>Limited Power Increase	M		9.2.2.21A		_	
>Inner Loop DL PC Status	M		9.2.2.21A 9.2.2.21a		_	
DCH Information	M		DCH FDD Information 9.2.2.4A		YES	reject
RL Information		1 <maxnr OfRLs&gt;</maxnr 			EACH	notify
>RL ID	M		9.2.1.49		_	
>C-ID	M		9.2.1.6		_	
>First RLS Indicator	M		9.2.2.16A		—	
>Frame Offset	M		9.2.1.30		_	
>Chip Offset	М О		9.2.2.1		-	
>Propagation Delay >Diversity Control Field	0 C-		9.2.2.33 9.2.1.20			
-	NotFirstRL				_	
>Initial DL TX Power	0		DL Power 9.2.1.21A		—	
>Primary CPICH Ec/No	0		9.2.2.32		—	
>Not Used	0		NULL		—	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.48		_	
>Enhanced Primary CPICH Ec/No	0		9.2.2.131		YES	ignore
>RL Specific DCH Information	0		9.2.1.49A		YES	ignore
>Delayed Activation	0		9.2.1.19Aa		YES	reject
>Cell Portion ID	0		9.2.2.E		YES	ignore
>RL specific E-DCH Information	0		9.2.2.35a		YES	reject
>E-DCH RL Indication	0		9.2.2.4E		YES	reject
>Extended Propagation Delay	0		9.2.2.33a		YES	ignore
>Synchronisation Indicator	0		9.2.2.45A		YES	reject
>HS-DSCH Preconfiguration Setup	0		9.2.2.100		YES	ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.124		YES	ignore
>F-TPICH Information	0	1	9.2.2.139		YES	ignore
Transmission Gap Pattern Sequence Information	0		9.2.2.47A		YES	reject
Active Pattern Sequence	0		9.2.2.A		YES	reject
Information Permanent NAS UE Identity	0		9.2.1.73		YES	ignoro
DL Power Balancing	0	+	9.2.1.73 9.2.2.10A		YES	ignore ignore
Information			3.2.2.TUA			gible
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-PDSCH RL ID	C – InfoHSDS CH		RL ID 9.2.1.49		YES	reject
MBMS Bearer Service List		0 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	notify

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	•		
>TMGI	М		9.2.1.80		_	
E-DPCH Information		01			YES	reject
>Maximum Set of E- DPDCHs	М		9.2.2.24e		_	
>Puncture Limit	М		9.2.1.46		_	
>E-TFCS Information	M		9.2.2.4G		_	
>E-TTI	M		9.2.2.4J		_	
>E-DPCCH Power Offset	M		9.2.2.4K		_	
>E-RGCH 2-Index-Step Threshold	M		9.2.2.64		_	
>E-RGCH 3-Index-Step Threshold	М		9.2.2.65		_	
>HARQ Info for E-DCH	М		9.2.2.66		_	
>HS-DSCH Configured	M		9.2.2.19C		_	
Indicator			0.2.2.100			
>Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.102		YES	ignore
E-DCH FDD Information	C- EDCHInfo		9.2.2.4B		YES	reject
Serving E-DCH RL	0	+	9.2.2.38C		YES	reject
F-DPCH Information	<u> </u>	01	0.2.2.000		YES	reject
>Power Offset Information		1			-	16,601
>>PO2	М		Power Offset 9.2.2.30	This IE shall be ignored by DRNS.	_	
>FDD TPC Downlink Step Size	М		9.2.2.16		_	
>Limited Power Increase	М		9.2.2.21A		_	
>Inner Loop DL PC Status	Μ		9.2.2.21a		_	
>F-DPCH Slot Format Support Request	0		9.2.2.86		YES	reject
>F-DPCH Slot Format	0		9.2.2.85		YES	Ignore
Initial DL DPCH Timing Adjustment Allowed	0		9.2.2.21b		YES	ignore
DCH Indicator For E-DCH- HSDPA Operation	0		9.2.2.67		YES	reject
Serving Cell Change CFN	0		CFN 9.2.1.9		YES	reject
Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.72		YES	reject
Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.74		YES	reject
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Additional HS Cell Information RL Setup		0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>C-ID	М		9.2.1.6		_	
>HS-DSCH Secondary	М		9.2.2.19aa		-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Serving Information						
UE Aggregate Maximum Bit Rate	0		9.2.1.137		YES	ignore
Additional E-DCH Cell Information RL Setup Req		01		For E-DCH on multiple frequencies in this DRNS.	YES	reject
>Multicell E-DCH Transport Bearer Mode	М		9.2.2.113		-	
>Additional E-DCH Cell Information Setup		1 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	_	
>Additional E-DCH FDD Setup Information	М		9.2.2.110		-	
Usefulness of Battery Optimization	0		9.2.2.127		YES	ignore
UL CLTD Information	0		9.2.2.131		YES	reject
Extended S-RNTI	0		9.2.1.154	The Extended S- RNT/ IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	reject

Condition	Explanation
CodeLen	The IE shall be present if Min UL Channelisation Code length IE
	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.
NotFirstRL	The IE shall be present if the RL is not the first one in the RL
	Information IE.
Diversity mode	The IE shall be present if Diversity Mode IE in UL DPCH Information
	IE is not equal to "none".
InfoHSDSCH	This IE shall be present if HS-DSCH Information IE is present.
EDCHInfo	This IE shall be present if E-DPCH Information IE is present.

Range bound	Explanation					
maxNrOfRLs	Maximum number of RLs for one UE.					
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.					
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.					
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.					

# 9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Onicality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
SRNC-ID	Μ		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	YES	reject
S-RNTI	М		9.2.1.53	If the Extended S- RNT/ IE is included in the message, the S-RNT/ IE shall be ignored.	YES	reject
D-RNTI	0		9.2.1.24		YES	reject
UL Physical Channel Information		1			YES	reject
>Maximum Number of Timeslots	М		9.2.3.3A	For the UL.	_	
>Minimum Spreading Factor	М		9.2.3.4A	For the UL.	_	
>Maximum Number of UL Physical Channels per Timeslot	М		9.2.3.3B		-	
>Support of 8PSK	0		9.2.3.7H	Applicable to 1.28Mcps TDD only.	YES	ignore
>Minimum Spreading Factor 7.68Mcps	0		9.2.3.19	Applicable to 7.68Mcps TDD only.	YES	ignore
DL Physical Channel Information		1			YES	reject
>Maximum Number of Timeslots	М		9.2.3.3A	For the DL.	_	
>Minimum Spreading Factor	М		9.2.3.4A	For the DL.	_	
>Maximum Number of DL Physical Channels	М		9.2.3.3C		-	
>Maximum Number of DL Physical Channels per Timeslot	0		9.2.3.3D		YES	ignore
>Support of 8PSK	0		9.2.3.7H	Applicable to 1.28Mcps TDD only.	YES	ignore
>Support of PLCCH	0		9.2.3.16	Applicable to 1.28Mcps TDD only.	YES	ignore

>Minimum Spreading Factor 7.68Mcps	0		9.2.3.19	Applicable to 7.68Mcps TDD only.	YES	ignore
>Maximum Number of DL Physical Channels 7.68Mcps	0		9.2.3.20	Applicable to 7.68Mcps TDD only.	YES	ignore
>Maximum Number of DL Physical Channels per Timeslot 7.68Mcps	0		9.2.3.21	Applicable to 7.68Mcps TDD only.	YES	ignore
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL CCTrCH Information		0 <maxn rOfCCTr CHs&gt;</maxn 		For DCH and USCH	EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
>TFCS	М		9.2.1.63	For the UL.	_	
>TFCI Coding	М		9.2.3.11		-	
>Puncture Limit	М		9.2.1.46		_	
>TDD TPC Uplink Step Size	0		9.2.3.10a	Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
DL CCTrCH Information		0 <maxn rOfCCTr CHs&gt;</maxn 		For DCH and DSCH.	EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
>TFCS	M		9.2.1.63	For the DL.	_	
>TFCI Coding	M		9.2.3.11		_	
>Puncture Limit	М		9.2.1.46		_	
>TDD TPC Downlink Step Size	М		9.2.3.10		-	
>TPC CCTrCH List		0 <maxn oCCTrC Hs&gt;</maxn 		List of uplink CCTrCH which provide TPC.	_	
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.2		_	
DCH Information	0		DCH TDD Information 9.2.3.2A		YES	reject
DSCH Information	0		DSCH TDD Information 9.2.3.3a		YES	reject
USCH Information	0	1	9.2.3.15		YES	reject
RL Information		1			YES	reject
>RL ID	М		9.2.1.49			
>C-ID	М		9.2.1.6		_	
>Frame Offset	М		9.2.1.30		Ι	
>Special Burst Scheduling	М		9.2.3.7D		Ι	
>Primary CCPCH RSCP	0		9.2.3.5		-	
>DL Time Slot ISCP Info	0		9.2.3.2D	Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	1	
>DL Time Slot ISCP Info LCR	0		9.2.3.2F	Applicable to 1.28Mcps TDD only.	YES	reject
>TSTD Support Indicator	0		9.2.3.13F	Applicable to 1.28Mcps TDD only.	YES	ignore
>RL Specific DCH Information	0		9.2.1.49A		YES	ignore
>Delayed Activation	0		9.2.1.19Aa		YES	reject

	1	T -				
>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		9.2.3.13J		-	
>>Uplink Synchronisation Frequency	М		9.2.3.131		-	
>Primary CCPCH RSCP Delta	0		9.2.3.5a		YES	ignore
>Idle Interval Configuration Indicator	0		NULL	TDD only.	YES	ignore
>Cell Portion LCR ID	0		9.2.3.73	Applicable to 1.28Mcps TDD only.	YES	ignore
Permanent NAS UE Identity	0		9.2.1.73		YES	ignore
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.3aa		YES	reject
HS-PDSCH RL ID	C – InfoHSDSC H		RL ID 9.2.1.49		YES	reject
PDSCH-RL-ID	0		RL ID 9.2.1.49		YES	ignore
MBMS Bearer Service List		0 <maxn rOfMBM SService s&gt;</maxn 			GLOBAL	notify
>TMGI	М		9.2.1.80		—	
E-DCH Information		01		3.84Mcps TDD only.	YES	reject
>E-PUCH Information	Μ		9.2.3.36		_	
>E-TFCS Information TDD	Μ		9.2.3.37		-	
>E-DCH MAC-d Flows	М		9.2.3.38		-	
Information TDD	M		0.0.0.40			
>E-DCH TDD Information	M O		9.2.3.40 RL ID	TDD only	– YES	raiaat
E-DCH Serving RL	0		9.2.1.49	TDD only.		reject
E-DCH Information 7.68Mcps		01		7.68Mcps TDD only.	YES	reject
>E-PUCH Information	Μ		9.2.3.36		—	
>E-TFCS Information TDD	Μ		9.2.3.37		_	
>E-DCH MAC-d Flows Information TDD	М		9.2.3.38		_	
>E-DCH TDD Information 7.68Mcps	М		9.2.3.51		-	
E-DCH Information 1.28Mcps		01		1.28Mcps TDD only.	YES	reject
>E-PUCH Information LCR	М		9.2.3.36a		-	
>E-TFCS Information TDD	М		9.2.3.37		_	
>E-DCH MAC-d Flows Information TDD	М		9.2.3.38		-	
>E-DCH TDD Information LCR	М		9.2.3.40a		-	
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Continuous Packet	0		9.2.3.61	1.28 Mcps	YES	reject

Connectivity DRX Information LCR				TDD only.		
HS-DSCH Semi-Persistent scheduling Information LCR	0		9.2.3.64	1.28 Mcps TDD only.	YES	reject
E-DCH Semi-Persistent scheduling Information LCR	0		9.2.3.66	1.28 Mcps TDD only.	YES	reject
RNTI Allocation Indicator	0		ENUMERA TED (True)	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Type indicator	0		9.2.3.76	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information		01		Applicable for Multi-Carrier E-DCH Operation in 1.28 Mcps TDD only.	YES	reject
>Multi-Carrier E-DCH Transport Bearer Mode LCR	M		9.2.3.79	1.28 Mcps TDD only.	-	
>Multi-Carrier E-DCH Information LCR	М		9.2.3.77	1.28 Mcps TDD only.	_	
MU-MIMO Indicator	0		9.2.3.82	1.28 Mcps TDD only.	YES	reject
Extended S-RNTI	0		9.2.1.154	The Extended S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	reject

Condition	Explanation				
InfoHSDSCH	This IE shall be present if HS-DSCH Information IE is present.				

Range bound	Explanation
maxNrOfCCTrCHs	Maximum number of CCTrCH for one UE.
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.

#### 9.1.4 RADIO LINK SETUP RESPONSE

#### 9.1.4.1 FDD Message

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
D-RNTI	0		9.2.1.24		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0		9.2.1.11		YES	ignore
RL Information Response		1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	М		9.2.1.49		_	
>RL Set ID	М		9.2.2.35		-	
>URA Information	0		9.2.1.70B		-	
>SAI	М		9.2.1.52		-	
>Cell GAI	0		9.2.1.5A		-	
>UTRAN Access Point Position	0		9.2.1.70A		_	
>Received Total Wide Band Power	М		9.2.2.35A		_	
>Not Used	0		NULL		_	
>DL Code Information	M		FDD DL Code		_	
			Information 9.2.2.14A			
>CHOICE Diversity Indication	М				—	
>>Combining					_	
>>>RL ID	Μ		9.2.1.49	Reference RL ID for the combining.	_	
>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>Non Combining or First RL					_	
>>>DCH Information Response	М		9.2.1.16A		_	
>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>SSDT Support Indicator	М	1	9.2.2.43		-	
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>Closed Loop Timing Adjustment Mode	0		9.2.2.3A		-	
>Maximum Allowed UL Tx Power	М		9.2.1.35		-	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		-	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		-	
>Primary Scrambling Code	0		9.2.1.45		-	
>UL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nu in TS 25.104 [6].	_	
>DL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nd in TS 25.104 [6].	_	
>Primary CPICH Power	М		9.2.1.44		-	
>Not Used	0		NULL		_	

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>PC Preamble	М		9.2.2.27a			
>SRB Delay	M		9.2.2.39A		_	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>DL Power Balancing Activation Indicator	0		9.2.2.10B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Primary CPICH Usage For Channel Estimation	0		9.2.2.32A		YES	ignore
>Secondary CPICH Information	0		9.2.2.38A		YES	ignore
>Active MBMS Bearer Service List		0 <maxnr OfActiveM BMSServi</maxnr 			GLOBAL	ignore
		ces>				
>>TMGI	M		9.2.1.80		—	
>>Transmission Mode	0		9.2.1.81		—	
>>Preferred Frequency Layer	0		UARFCN 9.2.1.66		-	
>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.9A		YES	ignore
>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>Frame Offset	0		9.2.1.30		YES	ignore
>Chip Offset	0		9.2.2.1		YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
>F-TPICH Information Response	0		9.2.2.143		YES	ignore
Uplink SIR Target	0		Uplink SIR 9.2.1.69		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH FDD Information Response 9.2.2.19b		YES	ignore
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	ignore
SixtyfourQAM DL Support Indicator	0		9.2.1.123		YES	ignore
Additional HS Cell Information Response		0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	ignore

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IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			<b>,</b>
>HS-PDSCH RL ID	М		RL ID		-	
			9.2.1.49			
>HS-DSCH-RNTI	М		9.2.1.30P		-	
>HS-DSCH FDD Secondary	М		9.2.2.19ba		-	
Serving Information						
Response						
>SixtyfourQAM DL Support	0		9.2.1.123		-	
Indicator						
Additional E-DCH Cell		0 <maxnr< td=""><td></td><td>E-DCH on</td><td>EACH</td><td>ignore</td></maxnr<>		E-DCH on	EACH	ignore
Information Response		OfEDCH-		Secondary		
		1>		uplink		
				frequency -		
				max 1 in this		
				3GPP		
				release.		
>Additional E-DCH FDD	М		9.2.2.120		_	
Information Response						

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

## 9.1.4.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	10,000
D-RNTI	0		9.2.1.24		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0		9.2.1.12		YES	
RL Information Response		01		Mandatory for 3.84Mcps TDD, not applicable to 1.28Mcps TDD or 7.68Mcps TDD.	YES	ignore ignore
>RL ID	M		9.2.1.49		-	
>URA Information	0		9.2.1.70B		_	
>SAI	М		9.2.1.52		—	
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A		-	
>UL Time Slot ISCP Info	М		9.2.3.13D		_	
>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		-	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>Maximum Allowed UL Tx Power	М		9.2.1.35		-	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		-	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		-	
>UARFCN	0		9.2.1.66	Corresponds to Nt in TS 25.105 [7].	_	
>Cell Parameter ID	0		9.2.1.8	• • •	_	
>Sync Case	0		9.2.1.54		_	
>SCH Time Slot	C-Case2		9.2.1.51		_	
>SCTD Indicator	0		9.2.1.78			
					-	
>PCCPCH Power	M		9.2.1.43		-	
>Timing Advance Applied	М		9.2.3.12A		-	
>Alpha Value	М		9.2.3.a		-	
>UL PhysCH SF Variation	М		9.2.3.13B		-	
>Synchronisation Configuration	М		9.2.3.7E		-	
>Secondary CCPCH Info TDD	0		9.2.3.7B		-	
>UL CCTrCH Information		0 <maxnr OfCCTrCH s&gt;</maxnr 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	Μ		9.2.3.2		-	
>>UL DPCH Information		01			YES	ignore
>>>Repetition Period	Μ		9.2.3.7			
>>>Repetition Length	М		9.2.3.6		_	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>UL Timeslot Information	М		9.2.3.13C		-	
>>Uplink SIR Target CCTrCH	0		Uplink SIR 9.2.1.69		YES	ignore
>DL CCTrCH Information		0 <maxnr OfCCTrCH s&gt;</maxnr 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
22001101110		1	5.2.0.2	1	L	1

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
>>DL DPCH Information		01			YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	Μ		9.2.3.6		_	
>>>TDD DPCH Offset	Μ		9.2.3.8A		—	
>>>DL Timeslot Information	М		9.2.3.2C			
>>CCTrCH Maximum DL	0		DL Power	Maximum	YES	ignoro
TX Power	0		9.2.1.21A	allowed power on DPCH.	TES	ignore
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	YES	ignore
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DSCH Information		0			GLOBAL	ignore
Response		<pre></pre>			GLODAL	ignore
>>DSCH ID	Μ		9.2.3.3ae		_	
>>DSCH Flow Control	М		9.2.3.3ag		-	
Information		ļ				
>>Binding ID	0		9.2.1.3		-	
>>Transport Layer Address	0		9.2.1.62		_	
>>Transport Format Management	М		9.2.3.13		_	
>USCH Information		0			GLOBAL	ignore
Response		<pre></pre>			GLOBAL	ignore
>>USCH ID	Μ		9.2.3.14		_	
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		_	
>>Transport Format Management	М		9.2.3.13		_	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		-	
>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Time Slot for SCH	C-Case1		Time Slot		YES	ignore
			9.2.1.56			
>Neighbouring E-UTRA	0		9.2.1.41De		YES	ignore
Cell Information						
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
Uplink SIR Target	М		Uplink SIR 9.2.1.69		YES	ignore
Criticality Diagnostics	0	1	9.2.1.13	1	YES	ignore
RL Information Response LCR		01	0.2.1.10	Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
>RL ID	М		9.2.1.49		-	
>URA Information	M		9.2.1.70B		-	
>SAI	M		9.2.1.52		_	
>Cell GAI	0		9.2.1.5A		-	
>UTRAN Access Point Position	0		9.2.1.70A		-	
>UL Time Slot ISCP Info	М	1	9.2.3.13H	1	_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>Maximum Uplink SIR	М		Uplink SIR		_	
			9.2.1.69			
>Minimum Uplink SIR	М		Uplink SIR		-	
>Maximum Allowed UL Tx	M		9.2.1.69 9.2.1.35			
Power	IVI		9.2.1.35		_	
>Maximum DL TX Power	М		DL Power		_	
			9.2.1.21A			
>Minimum DL TX Power	М		DL Power 9.2.1.21A		-	
>UARFCN	0		9.2.1.21A 9.2.1.66	Corresponds	_	
	Ũ		0.2.1100	to Nt in TS		
				25.105 [7].		
>Cell Parameter ID	0		9.2.1.8		-	
>SCTD Indicator	0		9.2.1.78		-	
>PCCPCH Power	М		9.2.1.43		-	
>Alpha Value	М		9.2.3.a		-	
>UL PhysCH SF Variation	M		9.2.3.13B		-	
>Synchronisation	М		9.2.3.7E		-	
Configuration	0		0.0.0.75			
>Secondary CCPCH Info TDD LCR	0		9.2.3.7F		-	
>UL CCTrCH Information		0 <maxnr< td=""><td></td><td>For DCH.</td><td>GLOBAL</td><td>ignore</td></maxnr<>		For DCH.	GLOBAL	ignore
LCR		ofCCTrCH sLCR>		T OF DOTI.	GLODAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>UL DPCH Information LCR		01			YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	М		9.2.3.6		-	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>UL Timeslot Information LCR	М		9.2.3.13G		-	
>>Uplink SIR Target CCTrCH	0		Uplink SIR 9.2.1.69		YES	ignore
>DL CCTrCH Information LCR		0 <maxnr OfCCTrCH sLCR&gt;</maxnr 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	Μ		9.2.3.2		-	
>>DL DPCH Information LCR		01			YES	ignore
>>>Repetition Period	М		9.2.3.7		-	
>>>Repetition Length	М		9.2.3.6		-	
>>>TDD DPCH Offset	Μ		9.2.3.8A		-	
>>>DL Timeslot Information LCR	М		9.2.3.2E		-	
>>>TSTD Indicator	М		9.2.3.13E		_	
>DCH Information	0		9.2.1.16A		YES	ignore
Response						<u> </u>
>DSCH Information Response LCR		0 <maxnoof DSCHsLC R&gt;</maxnoof 			GLOBAL	ignore
>>DSCH ID	М		9.2.3.3ae	1	_	
>>DSCH Flow Control	M		9.2.3.3ag		-	
Information						
>>Binding ID	0		9.2.1.3	T	-	
>>Transport Layer Address	0		9.2.1.62		_	
>>Transport Format Management	М		9.2.3.13		_	
>USCH Information Response LCR		0 <maxnoof USCHsLC</maxnoof 			GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
		<i>R</i> >				
>>USCH ID	М		9.2.3.14		_	
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		-	
>>Transport Format Management	М		9.2.3.13		-	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		-	
>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>HCS Prio	0		9.2.1.30N		YES	ignore
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>Uplink Timing Advance	M		9.2.3.13K		YES	
Control LCR			9.2.3.13N		163	ignore
>PowerControl GAP	0		INTEGER (1255)	Unit: umber of subframes Applicable to 1.28Mcps TDD only.	YES	ignore
>SixtyfourQAM DL Support Indicator	0		9.2.1.123	Applicable to 1.28Mcps TDD only.	YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Idle Interval Information	0	1	9.2.3.60	TDD only.	YES	ignore
>Neighbouring UMTS Cell	0		9.2.1.141	100 omgi	YES	ignore
Information Extension	U		0.2		0	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information	0		HS-DSCH		YES	ignore
Response			TDD Information Response 9.2.3.3ab			
DSCH-RNTI	0		9.2.3.3ah		YES	ignore
Active MBMS Bearer Service List		0 <maxnr OfActiveM BMSServi ces&gt;</maxnr 			GLOBAL	ignore
>TMGI	М		9.2.1.80		_	
>Transmission Mode	0		9.2.1.81		_	
>Preferred Frequency	0		UARFCN		-	
Layer RL Information Response		01	9.2.1.66	Mondatarrita	VEO	ienen-
7.68Mcps		01		Mandatory for 7.68Mcps TDD , not applicable to 1.28Mcps TDD or 3.84Mcps TDD.	YES	ignore
>RL ID	M	ļ	9.2.1.49		-	
>URA Information	0		9.2.1.70B		-	
>SAI	М		9.2.1.52		-	
>Cell GAI	0	ļ	9.2.1.5A		-	
>UTRAN Access Point Position	0		9.2.1.70A		-	
>UL Time Slot ISCP Info	М		9.2.3.13D			
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
				1	1	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>Minimum Uplink SIR >Maximum Allowed UL Tx Power	M M		Uplink SIR 9.2.1.69 9.2.1.35		_	

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Onlicanty
			9.2.1.21A			
>Minimum DL TX Power	М		DL Power		_	
	101		9.2.1.21A			
>UARFCN	0		UARFCN	Corresponds	_	
			9.2.1.66	to Nt in TS 25.105 [7].		
>Cell Parameter ID	0		9.2.1.8	20.100 [7].	_	
>Sync Case	0		9.2.1.54		_	
>SCH Time Slot	C-Case2		9.2.1.51		_	
>SCTD Indicator	0		9.2.1.78		_	
>PCCPCH Power	M		9.2.1.43		_	
>Timing Advance Applied	M		9.2.3.12A		_	
>Alpha Value	M		9.2.3.a		_	
>UL PhysCH SF Variation	M		9.2.3.13B		_	
>Synchronisation	M		9.2.3.7E		_	
Configuration	101		3.2.3.7 L			
>Secondary CCPCH Info	0		9.2.3.22		_	
7.68Mcps TDD	Ŭ		0.2.0.22			
>UL CCTrCH Information		0 <maxnr< td=""><td></td><td>For DCH.</td><td>GLOBAL</td><td>ignore</td></maxnr<>		For DCH.	GLOBAL	ignore
7.68 Mcps		OfCCTrCH s>			0200,12	ignoro
>>CCTrCH ID	М	3/	9.2.3.2		_	
>>UL DPCH Information	IVI	01	9.2.3.2		YES	ignore
>>>Repetition Period	М	01	9.2.3.7		163	ignore
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>UL Timeslot	M		9.2.3.8A 9.2.3.26		_	
Information 7.68Mcps	IVI		9.2.3.20		_	
>>Uplink SIR Target	0		Uplink SIR			
CCTrCH	0		9.2.1.69		_	
>DL CCTrCH Information 7.68 Mcps		0 <maxnr OfCCTrCH</maxnr 	0.2.1.00	For DCH.	GLOBAL	ignore
>>CCTrCH ID	М	\$>	9.2.3.2		_	
>>DL DPCH Information	IVI	01	9.2.3.2		YES	innene
	NA	01	0 0 0 7		TES	ignore
>>>Repetition Period	M		9.2.3.7		_	
>>>Repetition Length >>>TDD DPCH Offset	M		9.2.3.6		-	
	M		9.2.3.8A		-	
>>>DL Timeslot Information 7.68Mcps	М		9.2.3.28		_	
>>CCTrCH Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH.	_	
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	_	
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DSCH Information		0			GLOBAL	ignore
Response 7.68 Mcps		<maxnoof DSCHs&gt;</maxnoof 				
>>DSCH ID	М		9.2.3.3ae			
>>DSCH Flow Control	М		9.2.3.3ag		_	
	1		•			
Information					_	
>>Binding ID	0		9.2.1.3			
>>Binding ID >>Transport Layer	0 0		9.2.1.3 9.2.1.62		-	
>>Binding ID >>Transport Layer Address >>Transport Format					-	
>>Binding ID >>Transport Layer Address >>Transport Format Management	0	0	9.2.1.62			100-0
>>Binding ID >>Transport Layer Address >>Transport Format	0	0 <maxnoof< td=""><td>9.2.1.62</td><td></td><td>– – GLOBAL</td><td>ignore</td></maxnoof<>	9.2.1.62		– – GLOBAL	ignore
<ul> <li>&gt;Binding ID</li> <li>&gt;Transport Layer</li> <li>Address</li> <li>&gt;Transport Format</li> <li>Management</li> <li>&gt;USCH Information</li> </ul>	0	-	9.2.1.62			ignore

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
	-		Reference			
>>Transport Layer Address	0		9.2.1.62		-	
>>Transport Format Management	М		9.2.3.13		-	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>Cell GA Additional Shapes	0		9.2.1.5B		_	
>HCS Prio	0		9.2.1.30N		-	
>Time Slot for SCH	C-Case1		Time Slot 9.2.1.56		-	
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
E-DCH Information Response	0		E-DCH TDD Information Response 9.2.3.41	3.84Mcps TDD only.	YES	ignore
E-DCH Information Response 7.68Mcps	0		E-DCH TDD Information Response 7.68Mcps 9.2.3.52	7.68Mcps TDD only.	YES	ignore
E-DCH Information Response 1.28Mcps	0		E-DCH TDD Information Response 1.28Mcps 9.2.3.41a	1.28Mcps TDD only.	YES	ignore
Continuous Packet Connectivity DRX Information Response LCR	0		9.2.3.63	1.28 Mcps TDD only.	YES	ignore
HS-DSCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.68	1.28 Mcps TDD only.	YES	ignore
E-DCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.69	1.28 Mcps TDD only.	YES	ignore
E-RNTI for FACH	0		E-RNTI 9.2.1.94	1.28 Mcps TDD only.	YES	ignore
H-RNTI for FACH	0		HS-DSCH- RNTI 9.2.1.30P	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Occasion Information	0		9.2.3.75	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Response LCR	0		9.2.3.78	1.28 Mcps TDD only.	YES	ignore
MU-MIMO Information	0		9.2.3.81	1.28 Mcps TDD only.	YES	reject

Condition	Explanation
Case2	The IE shall be present if Sync Case IE is equal to "Case2".
Case1	This IE shall be present if Sync Case IE is equal to "Case1".

Range bound	Explanation
maxNoOfDSCHs	Maximum number of DSCHs for one UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxNoOfUSCHs	Maximum number of USCHs for one UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxNrOfCCTrCHs	Maximum number of CCTrCH for one UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxNoOfDSCHsLCR	Maximum number of DSCHs for one UE for 1.28Mcps TDD.
maxNoOfUSCHsLCR	Maximum number of USCHs for one UE for 1.28Mcps TDD.
maxNrOfCCTrCHsLCR	Maximum number of CCTrCH for one UE for 1.28Mcps TDD.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.

## 9.1.5 RADIO LINK SETUP FAILURE

#### 9.1.5.1 FDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
D-RNTI	0		9.2.1.24		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0		9.2.1.11		YES	ignore
CHOICE Cause Level	Μ				YES	ignore
>General					—	
>>Cause	Μ		9.2.1.5		—	
>RL Specific					-	
>>Unsuccessful RL Information Response		1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>>>RL ID	М		9.2.1.49		_	
>>>Cause	M		9.2.1.5		_	
>>>Max UE DTX Cycle	C-DTX- CycleNotA vailable		9.2.2.87		YES	ignore
>>Successful RL		0 <maxnr< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnr<>			EACH	ignore
Information Response		OfRLs-1>				-
>>>RL ID	М		9.2.1.49		-	
>>>RL Set ID	М		9.2.2.35		_	
>>>URA Information	0		9.2.1.70B		_	
>>>SAI	M		9.2.1.52		_	
>>>Cell GAI	0		9.2.1.5A		_	
>>>UTRAN Access Point	0		9.2.1.70A		_	
Position >>>Received Total Wide						
Band Power	M		9.2.2.35A		-	
>>>Not Used	0		NULL		-	
>>>DL Code Information	M		FDD DL Code Information 9.2.2.14A		_	
>>>CHOICE Diversity Indication	М				_	
>>>Combining					_	
>>>>RL ID	М		9.2.1.49	Reference RL ID for the combining.	_	
>>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>>Non Combining or First RL					-	
>>>>DCH Information Response	Μ		9.2.1.16A		_	
>>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>>SSDT Support Indicator	Μ		9.2.2.43		-	
>>>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>>>Minimum Uplink SIR	Μ		Uplink SIR 9.2.1.69		_	
>>>Closed Loop Timing Adjustment Mode	0		9.2.2.3A		-	
>>>Maximum Allowed UL Tx Power	Μ		9.2.1.35		-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>>Maximum DL TX	М		DL Power			
Power	IVI		9.2.1.21A		_	
>>>Minimum DL TX	М		DL Power		_	
Power			9.2.1.21A			
>>>Primary CPICH	М		9.2.1.44		-	
Power >>>Primary Scrambling	0		9.2.1.45			
Code			9.2.1.40			
>>>UL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nu in TS	_	
				25.104 [6].		
>>>DL UARFCN	0		UARFCN	Corresponds	_	
			9.2.1.66	to Nd in TS 25.104 [6].		
>>>Not Used	0		NULL		-	
>>Neighbouring UMTS Cell Information	0		9.2.1.41A		-	
>>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>>>PC Preamble	М		9.2.2.27a		_	
>>>SRB Delay	М		9.2.2.39A		_	
>>>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>>>DL Power Balancing Activation Indicator	0		9.2.2.10B		YES	ignore
>>>HCS Prio	0		9.2.1.30N		YES	ignore
>>>Primary CPICH Usage For Channel Estimation	0		9.2.2.32A		YES	ignore
>>>Secondary CPICH Information	0		9.2.2.38A		YES	ignore
>>>Active MBMS Bearer Service List		0 <maxnr OfActiveM BMSServi ces&gt;</maxnr 			GLOBAL	ignore
>>>TMGI	Μ	0032	9.2.1.80		_	
>>>>Transmission Mode	0		9.2.1.81		_	
>>>Preferred	0		UARFCN		_	
Frequency Layer			9.2.1.66			
>>>E-DCH RL Set ID	0		RL Set ID		YES	ignore
>>>E-DCH FDD DL	0		9.2.2.35 9.2.2.4D		YES	ignore
Control Channel Information			9.2.2.40		TES	ignore
>>>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing		YES	ignore
			Adjustment 9.2.2.9A			
>>>Neighbouring E- UTRA Cell Information	0		9.2.1.41De		YES	ignore
>>>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>>>F-DPCH Slot Format	0	+	9.2.2.85		YES	ignore
>>>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>>>Neighbouring UMTS Cell Information	0		9.2.1.141		YES	ignore
Extension						
>>HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
>>HS-DSCH Information	0		HS-DSCH		YES	ignore
Response	1	1	FDD	1		1

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			Information Response 9.2.2.19b			
>>Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	ignore
>>SixtyfourQAM DL Support Indicator	0		9.2.1.123		YES	ignore
>>Additional HS Cell Information Response	0	0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	ignore
>>>HS-PDSCH RL ID	М		RL ID 9.2.1.49		-	
>>>HS-DSCH-RNTI	Μ		9.2.1.30P		_	
>>>HS-DSCH FDD Secondary Serving Information Response	М		9.2.2.19ba		-	
>>>SixtyfourQAM DL Support Indicator	0		9.2.1.123		_	
>>Additional E-DCH Cell Information Response		0 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	EACH	ignore
>>>Additional E-DCH FDD Information Response	М		9.2.2.120		-	
Uplink SIR Target	0		Uplink SIR 9.2.1.69		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

Condition	Explanation				
DTX-CycleNotAvailable	The IE shall be present if the Cause IE is set to Continuous Packet				
	Connectivity UE DTX Cycle not Available ".				

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

## 9.1.5.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	Μ		9.2.1.59		-	
CHOICE Cause Level	М				YES	ignore
>General					_	
>>Cause	М		9.2.1.5		_	
>RL Specific					_	
>>Unsuccessful RL Information Response		1			YES	ignore
>>>RL ID	М		9.2.1.49		_	
>>>Cause	М		9.2.1.5		_	
>>SixtyfourQAM DL Support Indicator	0		9.2.1.123		YES	ignore
Criticality Diagnostics	0	İ	9.2.1.13		YES	ignore

## 9.1.6 RADIO LINK ADDITION REQUEST

#### 9.1.6.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
Uplink SIR Target	М		Uplink SIR 9.2.1.69		YES	reject
RL Information		1 <max NrOfRLs- 1&gt;</max 			EACH	notify
>RL ID	М		9.2.1.49		_	
>C-ID	М		9.2.1.6		_	
>Frame Offset	М		9.2.1.30		-	
>Chip Offset	М		9.2.2.1			
>Diversity Control Field	М		9.2.1.20		-	
>Primary CPICH Ec/No	0		9.2.2.32		-	
>Not Used	0		NULL		-	
>Transmit Diversity Indicator	0		9.2.2.48	_	_	
>DL Reference Power	0		DL Power 9.2.1.21A	Power on DPCH or on F-DPCH.	YES	ignore
>Enhanced Primary CPICH Ec/No	0		9.2.2.131		YES	ignore
>RL Specific DCH Information	0		9.2.1.49A		YES	ignore
>Delayed Activation	0		9.2.1.19Aa		YES	reject
>RL specific E-DCH Information	0		9.2.2.35a		YES	reject
>E-DCH RL Indication	0		9.2.2.4E		YES	reject
>Synchronisation Indicator	0		9.2.2.45A		YES	ignore
>HS-DSCH Preconfiguration Setup	0		9.2.2.100		YES	Ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.124		YES	Ignore
>F-TPICH Information	0		9.2.2.139		YES	ignore
Active Pattern Sequence Information	0		9.2.2A	Either all the already active Transmissio n Gap Sequence(s) are addressed (Transmissio n Gap Pattern sequence shall overlap with the existing one) or none of the transmission gap sequences is activated.	YES	reject
DPC Mode	0		9.2.2.12A		YES	reject
Permanent NAS UE Identity	0		9.2.1.73		YES	ignore
Serving E-DCH RL	0		9.2.2.38C		YES	reject
Initial DL DPCH Timing Adjustment Allowed	0		9.2.2.21b		YES	ignore
HS-DSCH Serving Cell	0		9.2.2.19f		YES	reject

Change Information						
Serving Cell Change CFN	0		CFN 9.2.1.9		YES	reject
E-DPCH Information		01	0.20		YES	reject
>Maximum Set of E-	М		9.2.2.24e		-	•
DPDCHs						
>Puncture Limit	M		9.2.1.46		-	
>E-TFCS Information	M		9.2.2.4G		-	
>E-TTI	M		9.2.2.4J		-	
>E-DPCCH Power Offset	M		9.2.2.4K 9.2.2.64		-	
>E-RGCH 2-Index-Step Threshold	IVI		9.2.2.04		-	
>E-RGCH 3-Index-Step	М		9.2.2.65		_	
Threshold	101		0.2.2.00			
>HARQ Info for E-DCH	М		9.2.2.66		_	
>HS-DSCH Configured	M		9.2.2.19C		YES	reject
Indicator					_	- <b>,</b>
>Minimum Reduced E-	0		9.2.2.102		YES	ignore
DPDCH Gain Factor						-
E-DCH FDD Information	C-		9.2.2.4B		YES	reject
	EDCHInfo			_		
Additional HS Cell Information RL Addition		0 <max NrOfHSD SCH-1&gt;</max 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID		_	
			9.2.1.49			
>C-ID	Μ		9.2.1.6		_	
>HS-DSCH FDD Secondary	М		9.2.2.19aa		-	
Serving Information			0.0.4.407		)/50	
UE Aggregate Maximum Bit Rate	0		9.2.1.137		YES	ignore
Additional E-DCH Cell Information RL Add Req		01		For E-DCH on multiple frequencies in this DRNS.	YES	reject
>CHOICE Setup Or Addition Of E-DCH On Secondary UL Frequency	M				YES	reject
>> Setup				Used when the secondary UL frequency does not exist or is not configured with E-DCH in the current UE context.	_	
>>>Multicell E-DCH Transport Bearer Mode	М		9.2.2.113		-	
>>>Additional E-DCH Cell Information Setup		1 <max NrOfEDC H-1&gt;</max 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	_	
>>>Additional E- DCH FDD Setup Information	М		9.2.2.110		_	

>> Addition				Used when there exist additional E- DCH RLs in the current UE context.	_	
>>>Additional E-DCH Cell Information Addition		1 <max NrOfEDC H-1&gt;</max 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	_	
>>>UL DPCH Information		1			_	
>>>>Uplink SIR Target	М		Uplink SIR 9.2.1.69		_	
>>>>Additional E-DCH RL Specific Information To Add	М		9.2.2.116		_	
>>>>Additional E-DCH FDD Information	0		9.2.2.112		_	
>>>>Multicell E-DCH Information	0		9.2.2.114		YES	ignore
UL CLTD Information	0		9.2.2.131		YES	reject

Condition	Explanation
EDCHInfo	This IE shall be present if E-DPCH Information IE is present.

Range bound	Explanation
maxNrOfRLs	Maximum number of radio links for one UE.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH
	for one UE.

## 9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
RL Information		1			YES	reject
>RL ID	M		9.2.1.49		_	
>C-ID	M		9.2.1.6		_	
>Frame Offset	M		9.2.1.30		—	
>Diversity Control Field >Primary CCPCH RSCP	M O		9.2.1.20 9.2.3.5		_	
>DL Time Slot ISCP Info	0		9.2.3.5 9.2.3.2D	Applicable to		
	0			3.84Mcps TDD and 7.68Mcps TDD only.	_	
>DL Time Slot ISCP Info LCR	0		9.2.3.2F	Applicable to 1.28Mcps TDD only.	YES	reject
>RL Specific DCH Information	0		9.2.1.49A		YES	ignore
>Delayed Activation	0		9.2.1.19Aa		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		9.2.3.13J		-	
>>Uplink Synchronisation Frequency	М		9.2.3.131		_	
> Primary CCPCH RSCP Delta	0		9.2.3.5a		YES	ignore
> Idle Interval Configuration Indicator	0		NULL	TDD only.	YES	ignore
Permanent NAS UE Identity	0		9.2.1.73		YES	ignore
UL CCTrCH Information		0< maxNr OfCCTr CHs >			EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
>TDD TPC Uplink Step Size	0		9.2.3.10a	Applicable to 1.28Mcps TDD only.	_	
DL CCTrCH Information		0< maxNr OfCCTr CHs >			EACH	notify
>CCTrCH ID	М		9.2.3.2		-	
>TDD TPC Downlink Step Size	0		9.2.3.10		-	
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.3aa		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.49		YES	reject
E-DCH Information		01		3.84Mcps TDD only.	YES	reject
>E-PUCH Information	М	1	9.2.3.36	í í	_	

>E-TFCS Information TDD	Μ		9.2.3.37		_	
>E-DCH MAC-d Flows	M		9.2.3.38		_	
Information TDD						
>E-DCH TDD Information	М		9.2.3.40		_	
E-DCH Serving RL	0		RL ID	3.84Mcps	YES	reject
, i i i i i i i i i i i i i i i i i i i			9.2.1.49	TDD only.		-
E-DCH Information		01		7.68Mcps	YES	reject
7.68Mcps				TDD only.		-
>E-PUCH Information	М		9.2.3.36		-	
>E-TFCS Information TDD	М		9.2.3.37		_	
>E-DCH MAC-d Flows	М		9.2.3.38		_	
Information TDD						
>E-DCH TDD Information	М		9.2.3.51		_	
7.68Mcps						
E-DCH Information		01		1.28Mcps	YES	reject
1.28Mcps				TDD only.		
>E-PUCH Information LCR	М		9.2.3.36a		_	
>E-TFCS Information TDD	М		9.2.3.37		_	
>E-DCH MAC-d Flows	М		9.2.3.38		-	
Information TDD						
>E-DCH TDD Information	М		9.2.3.40a		_	
LCR						
Continuous Packet	0		9.2.3.61	1.28 Mcps	YES	reject
Connectivity DRX				TDD only.		
Information LCR	-					
HS-DSCH Semi-Persistent	0		9.2.3.64	1.28 Mcps	YES	reject
scheduling Information LCR				TDD only.		
E-DCH Semi-Persistent	0		9.2.3.66	1.28 Mcps	YES	reject
scheduling Information LCR	0		0.0.0.70	TDD only.		
DCH Measurement Type	0		9.2.3.76	1.28 Mcps	YES	reject
indicator Multi-Carrier E-DCH		01		TDD only. Applicable	YES	raiaat
Information		01		for Multi-	TES	reject
mormation				Carrier E-		
				DCH		
				Operation in		
				1.28 Mcps		
				TDD only.		
>Multi-Carrier E-DCH	М		9.2.3.79	1.28 Mcps		
Transport Bearer Mode			0.2.0.10	TDD only.		
LCR				i de oniy.		
>Multi-Carrier E-DCH	М		9.2.3.77	1.28 Mcps	_	
Information LCR			0.2.0	TDD only.		
MU-MIMO Indicator	0		9.2.3.82	1.28 Mcps	YES	reject
	-			TDD only.		.,

Range bound	Explanation
maxNrOfCCTrCHs	Maximum number of CCTrCH for one UE.

## 9.1.7 RADIO LINK ADDITION RESPONSE

#### 9.1.7.1 FDD Message

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
RL Information Response		1 <maxnrof RLs-1&gt;</maxnrof 			EACH	ignore
>RL ID	М		9.2.1.49		-	
>RL Set ID	М		9.2.2.35		—	
>URA Information	0		9.2.1.70B		_	
>SAI	М		9.2.1.52		-	
>Cell GAI	0		9.2.1.5A		-	
>UTRAN Access Point Position	0		9.2.1.70A		-	
>Received Total Wide Band Power	М		9.2.2.35A		_	
>Not Used	0		NULL		-	
>DL Code Information	М		FDD DL Code Information 9.2.2.14A		YES	ignore
>CHOICE Diversity Indication	М				-	
>>Combining					-	
>>>RL ID	М		9.2.1.49	Reference RL ID.	-	
>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>Non Combining			0.0.4.404		-	
>>>DCH Information Response	M		9.2.1.16A		-	
>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>SSDT Support Indicator	M		9.2.2.43		-	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>Closed Loop Timing Adjustment Mode	0		9.2.2.3A		_	
>Maximum Allowed UL Tx Power	М		9.2.1.35		-	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		-	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		-	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		-	
>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>PC Preamble	М		9.2.2.27a		-	
>SRB Delay	M		9.2.2.39A		_	
>Primary CPICH Power	М		9.2.1.44		_	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>DL Power Balancing Activation Indicator	0		9.2.2.10B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Active MBMS Bearer		0 <maxnrof< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></maxnrof<>			GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Service List		ActiveMBM SServices>				
>>TMGI	М		9.2.1.80		_	
>>Transmission Mode	0		9.2.1.81		_	
>>Preferred Frequency	0		UARFCN		-	
Layer	_		9.2.1.66			
>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.9.A		YES	ignore
>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
>F-TPICH Information	0		9.2.2.143		YES	ignore
Response Criticality Diagnostics	0		9.2.1.13		YES	ianoro
HS-DSCH Serving Cell	0		9.2.1.13 9.2.2.19g		YES	ignore ignore
Change Information Response			3.z.z. 13g		120	ignore
E-DCH Serving Cell Change Information Response	0		9.2.2.19h		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
Additional HS Cell Change Information Response		0 <maxnrof HSDSCH-1&gt;</maxnrof 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID		_	
>HS-DSCH Secondary Serving Cell Change	М		9.2.1.49 9.2.2.19ga		_	
Information Response Additional E-DCH Cell		0 <maxnrof< td=""><td></td><td>E-DCH on</td><td>EACH</td><td>ignore</td></maxnrof<>		E-DCH on	EACH	ignore
Information Response RL Add		EDCH-1>		Secondary uplink frequency – max 1 in this 3GPP release.		
>Additional E-DCH FDD Information Response	0		9.2.2.120		_	
>Additional E-DCH Serving Cell Change Information response	0		E-DCH Serving Cell Change Information Response 9.2.2.19h		_	

Range bound	Explanation
maxNrOfRLs	Maximum number of radio links for one UE.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

## 9.1.7.2 TDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
Maaaaaa			Reference		VEO	reie et
Message Type Transaction ID	M		9.2.1.40 9.2.1.59		YES	reject
RL Information Response	IVI	01	9.2.1.59	Mandatawi	YES	
		01		Mandatory for 3.84Mcps TDD, not applicable to 1.28Mcps TDD or 7.68Mcps TDD.		ignore
>RL ID	M		9.2.1.49		_	
>URA Information	0		9.2.1.70B		-	
>SAI	М		9.2.1.52		_	
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A		-	
>UL Time Slot ISCP Info	М		9.2.3.13D		_	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Maximum Allowed UL Tx Power	М		9.2.1.35		_	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	
>PCCPCH Power	M		9.2.1.43		_	
>Timing Advance Applied	M		9.2.3.12A			
>Alpha Value	M		9.2.3.a		_	
>UL PhysCH SF Variation	M		9.2.3.13B			
>Synchronisation Configuration	M		9.2.3.7E		_	
>Secondary CCPCH Info TDD	0		9.2.3.7B		_	
>UL CCTrCH Information		0 <maxnro fCCTrCHs&gt;</maxnro 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>UL DPCH		01	0.2.0.2		YES	ignore
Information						ignere
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		-	
>>>UL Timeslot Information	М		9.2.3.13C		_	
>DL CCTrCH Information		0 <maxnro fCCTrCHs&gt;</maxnro 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>DL DPCH Information		01	0.2.0.2		YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6			
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot	M		9.2.3.2C		_	
Information >>CCTrCH Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on	YES	ignore
				DPCH.		
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed	YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				power on		
				DPCH.		
>DCH Information		01			_	
>>CHOICE Diversity Indication	М				-	
>>>Combining			0.0.4.40	D (	—	
>>>>RL ID	Μ		9.2.1.49	Reference RL.	-	
>>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>Non Combining					_	
>>>>DCH Information Response	М		9.2.1.16A		_	
>DSCH Information		0			GLOBAL	ignore
Response		<maxnoof DSCHs&gt;</maxnoof 				.g. ere
>>DSCH ID	М	1	9.2.3.3ae		-	
>>Transport Format Management	М		9.2.3.13		-	
>DSCH Flow Control Information	М		9.2.3.3ag		_	
>>CHOICE Diversity Indication	0				_	
>>>Non Combining					_	
>>>>Binding ID	0		9.2.1.3		-	
>>>>Transport Layer Address	0		9.2.1.62		_	
>USCH Information Response		0 <maxnoofu SCHs&gt;</maxnoofu 			GLOBAL	ignore
>>USCH ID	М		9.2.3.14		_	
>>Transport Format Management	Μ		9.2.3.13		-	
>>CHOICE Diversity Indication	0				-	
>>>Non Combining					-	
>>>>Binding ID	0		9.2.1.3		-	
>>>>Transport Layer Address	0		9.2.1.62		-	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		-	
>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
Criticality Diagnostics	0		9.2.1.13		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	М		9.2.1.49		_	
>URA Information	М		9.2.1.70B		_	
>SAI	Μ		9.2.1.52		_	

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A		-	
>UL Time Slot ISCP Info LCR	М		9.2.3.13H		-	
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>PCCPCH Power	М		9.2.1.43		_	
>Maximum Allowed UL Tx Power	М		9.2.1.35		-	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	
>Alpha Value	М		9.2.3.a		_	
>UL PhysCH SF Variation	M		9.2.3.a 9.2.3.13B		_	
>Synchronisation	M		9.2.3.75B 9.2.3.7E			
Configuration			0.2.0.7 L			
>Secondary CCPCH Info TDD LCR	0		9.2.3.7F		_	
>UL CCTrCH Information LCR		0 <maxnro fCCTrCHsL CR&gt;</maxnro 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М	0172	9.2.3.2			
>>UL DPCH	101	01	9.2.9.2		YES	ignore
Information LCR		01			123	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	М		9.2.3.6		_	
>>>TDD DPCH Offset	Μ		9.2.3.8A		_	
>>>UL Timeslot Information LCR	М		9.2.3.13G		_	
>DL CCTrCH Information LCR		0 <maxnro fCCTrCHsL CR&gt;</maxnro 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	Μ		9.2.3.2		_	
>>DL DPCH		01			YES	ignore
Information LCR						Ũ
>>>Repetition Period	Μ		9.2.3.7		_	
>>>Repetition Length	Μ		9.2.3.6		_	
>>>TDD DPCH Offset	Μ		9.2.3.8A		-	
>>>DL Timeslot	Μ		9.2.3.2E		-	
Information LCR						
>>>TSTD Indicator	M		9.2.3.13E		_	
>DCH Information	М		9.2.1.16A		-	
Response >DSCH Information			<u> </u>		GLOBAL	ionarc
Response LCR		0 <maxnoofd SCHsLCR&gt;</maxnoofd 			GLOBAL	ignore
>>DSCH ID	М		9.2.3.3ae		_	
>>DSCH Flow Control Information	M		9.2.3.3ag		_	
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		-	
>>Transport Format Management	М		9.2.3.13		_	
>USCH Information		0			GLOBAL	ignore
Response LCR		<maxnoofu SCHsLCR&gt;</maxnoofu 			CLODAL	ignore
>>USCH ID	М		9.2.3.14		_	
>>Transport Format	M		9.2.3.13		_	
Management						

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>CHOICE Diversity Indication	0				-	
>>>Non Combining					-	
>>>Binding ID	0		9.2.1.3		_	
>>>>Transport Layer Address	0		9.2.1.62		-	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Uplink Timing Advance Control LCR	M		9.2.3.13K		YES	ignore
>PowerControl GAP	0		INTEGER (1255)	Unit: number of subframes Applicable to 1.28Mcps TDD only.	YES	ignore
>UARFCN	0		9.2.1.66	Applicable to 1.28Mcps TDD only. Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt □3GPP TS 25.105 □.	YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Idle Interval Information	0		9.2.3.60	TDD only.	YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
Active MBMS Bearer Service List		0 <maxnro fActiveMBM SServices&gt;</maxnro 			GLOBAL	ignore
>TMGI	М		9.2.1.80		_	
>Transmission Mode	0		9.2.1.81		_	
>Preferred Frequency Layer	0		UARFCN 9.2.1.66		-	
HS-DSCH Information Response	0		HS-DSCH TDD Information Response 9.2.3.3ab		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
RL Information Response 7.68Mcps		01		Mandatory for 7.68Mcps TDD, not applicable to 1.28Mcps TDD or 3.84Mcps TDD.	YES	ignore
>RL ID	М		9.2.1.49		Ι	
>URA Information	0		9.2.1.70B			
>SAI	М		9.2.1.52		-	
>Cell GAI	0		9.2.1.5A		Ι	
>UTRAN Access Point	0		9.2.1.70A		_	
Position	1		1			1

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
>UL Time Slot ISCP Info	Μ		9.2.3.13D		-	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>Maximum Allowed UL Tx Power	М		9.2.1.35		_	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	
>PCCPCH Power	М		9.2.1.43		_	
>Timing Advance Applied	M		9.2.3.12A			
>Alpha Value	M					
>UL PhysCH SF Variation	M		9.2.3.a 9.2.3.13B		_	
					_	
>Synchronisation Configuration	M		9.2.3.7E		_	
>Secondary CCPCH Info 7.68Mcps TDD	0		9.2.3.22		-	
>UL CCTrCH Information 7.68 Mcps		0 <maxnro fCCTrCHs&gt;</maxnro 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М	-	9.2.3.2		-	
>>UL DPCH		01			YES	ignore
Information 7.68 Mcps						-g
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>UL Timeslot	M		9.2.3.26		_	
Information 7.68Mcps	101		0.2.0.20			
>DL CCTrCH Information		0 <maxnro< td=""><td></td><td>For DCH.</td><td>GLOBAL</td><td>ignore</td></maxnro<>		For DCH.	GLOBAL	ignore
7.68 Mcps		fCCTrCHs>		TOT DOT.	GLODAL	ignore
>>CCTrCH ID	М	1001101132	9.2.3.2		_	
>>DL DPCH		01	3.2.3.2		YES	ignore
Information 7.68 Mcps		01			120	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot	M		9.2.3.28			
Information 7.68Mcps	IVI		9.2.3.20		_	
>>CCTrCH Maximum DL	0		DL Power	Maximum	_	
TX Power	0		9.2.1.21A	allowed power on DPCH.		
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	_	
>DCH Information		01			_	
>>CHOICE Diversity Indication	М				-	
>>>Combining					_	
>>>>RL ID	М		9.2.1.49	Reference RL.	-	
>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>Non Combining					-	
>>>DCH Information	М		9.2.1.16A		_	
Response						
Response	-	-				·
>DSCH Information Response 7.68 Mcps		0 <maxnoof DSCHs&gt;</maxnoof 			GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>Transport Format Management	М		9.2.3.13		-	
>>DSCH Flow Control Information	М		9.2.3.3ag		-	
>>CHOICE Diversity Indication	0				-	
>>>Non Combining					_	
>>>Binding ID	0		9.2.1.3		_	
>>>>Transport Layer Address	0		9.2.1.62		_	
>USCH Information Response 7.68 Mcps		0 <maxnoofu SCHs&gt;</maxnoofu 			GLOBAL	ignore
>>USCH ID	Μ		9.2.3.14		_	
>>Transport Format Management	Μ		9.2.3.13		-	
>>CHOICE Diversity Indication	0				_	
>>>Non Combining					_	
>>>Binding ID	0		9.2.1.3		_	
>>>>Transport Layer Address	0		9.2.1.62		_	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>Cell GA Additional Shapes	0		9.2.1.5B		-	
>HCS Prio	0		9.2.1.30N		—	
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
E-DCH Information Response	0		E-DCH TDD Information Response 9.2.3.41	3.84Mcps TDD only.	YES	ignore
E-DCH Information Response 7.68Mcps	0		E-DCH TDD Information Response 7.68Mcps 9.2.3.52	7.68Mcps TDD only.	YES	ignore
E-DCH Information Response 1.28Mcps	0		E-DCH TDD Information Response 1.28Mcps 9.2.3.41a	1.28Mcps TDD only.	YES	ignore
Continuous Packet Connectivity DRX Information Response LCR	0		9.2.3.63	1.28 Mcps TDD only.	YES	ignore
HS-DSCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.68	1.28 Mcps TDD only.	YES	ignore
E-DCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.69	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Occasion Information	0		9.2.3.75	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Response LCR	0		9.2.3.78	1.28 Mcps TDD only.	YES	ignore
MU-MIMO Information	0		9.2.3.81	1.28 Mcps	YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				TDD only.		

Range Bound	Explanation
maxNoOfDSCHs	Maximum number of DSCHs for one UE for 3.84Mcps TDD.
maxNoOfUSCHs	Maximum number of USCHs for one UE for 3.84Mcps TDD.
maxNrOfCCTrCHs	Maximum number of CCTrCHs for one UE for 3.84Mcps TDD.
maxNoOfDSCHsLCR	Maximum number of DSCHs for one UE for 1.28Mcps TDD.
maxNoOfUSCHsLCR	Maximum number of USCHs for one UE for 1.28Mcps TDD.
maxNrOfCCTrCHsLCR	Maximum number of CCTrCH for one UE for 1.28Mcps TDD.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.

#### 9.1.8 RADIO LINK ADDITION FAILURE

#### 9.1.8.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	-
CHOICE Cause Level	М				YES	ignore
>General					_	
>>Cause	М		9.2.1.5		—	
>RL Specific					-	
>>Unsuccessful RL Information Response		1 <maxnrof RLs-1&gt;</maxnrof 			EACH	ignore
>>>RL ID	М		9.2.1.49		_	
>>>Cause	М		9.2.1.5		_	
>>Successful RL Information Response		0 <maxnrof RLs-2&gt;</maxnrof 			EACH	ignore
>>>RL ID	М	TLS-Z>	9.2.1.49		_	
>>>RL ID	M		9.2.1.49			
>>>URA Information	0		9.2.1.70B			
>>>SAI	M		9.2.1.52			
>>>Cell GAI	0		9.2.1.52 9.2.1.5A		_	
>>>UTRAN Access	0		9.2.1.5A 9.2.1.70A		-	
Point Position	_				_	
>>Received Total Wide Band Power	М		9.2.2.35A		-	
>>>Not Used	0		NULL		_	
>>>DL Code Information	M		FDD DL Code Information		YES	ignore
>>>CHOICE Diversity Indication	M		9.2.2.14A		_	
>>>Combining					_	
>>>>RL ID	М		9.2.1.49	Reference RL ID.	_	
>>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>>>Non Combining					_	
>>>>DCH Information Response	M		9.2.1.16A		_	
>>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>>SSDT Support Indicator	М		9.2.2.43		_	
>>>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>>>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>>>Closed Loop Timing Adjustment Mode	0		9.2.2.3A		_	
>>>Maximum Allowed UL Tx Power	М		9.2.1.35		_	
>>>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>>>Minimum DL TX Power	М		DL Power 9.2.1.21A		—	

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
>>Neighbouring UMTS Cell Information	0		9.2.1.41A		-	
>>>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>>>Primary CPICH Power	М		9.2.1.44		_	
>>>PC Preamble	М		9.2.2.27a		-	
>>>SRB Delay	М		9.2.2.39A		_	
>>>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>>>DL Power Balancing Activation Indicator	0		9.2.2.10B		YES	ignore
>>>HCS Prio	0		9.2.1.30N		YES	ignore
>>>Active MBMS Bearer Service List		0 <maxnrof ActiveMBM SServices&gt;</maxnrof 			GLOBAL	ignore
>>>>TMGI	М		9.2.1.80		_	
>>>>Transmission	0		9.2.1.81		_	
Mode						
>>>>Preferred Frequency Layer	0		UARFCN 9.2.1.66		_	
>>>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>>>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>>>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.9.A		YES	ignore
>>>Neighbouring E- UTRA Cell Information	0		9.2.1.41De		YES	ignore
>>>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>>>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>>>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>>>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH Serving Cell Change Information Response	0		9.2.2.19g		YES	Ignore
E-DCH Serving Cell Change Information Response	0		9.2.2.19h		YES	Ignore
Additional HS Cell Change Information Response		0 <maxnrof HSDSCH-1&gt;</maxnrof 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	Ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		-	
>HS-DSCH Secondary Serving Cell Change Information Response	М		9.2.2.19ga		-	
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
Additional E-DCH Cell Information Response RL Add	-	0 <maxnrof EDCH-1&gt;</maxnrof 		E-DCH on Secondary uplink	EACH	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				frequency – max 1 in this 3GPP release.		
>Additional E-DCH FDD Information Response	0		9.2.2.120		-	
>Additional E-DCH Serving Cell Change Information response	0		E-DCH Serving Cell Change Information Response 9.2.2.19h		_	

Range bound	Explanation
maxNrOfRLs	Maximum number of radio links for one UE.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

#### 9.1.8.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
CHOICE Cause Level	М				YES	ignore
>General					-	
>>Cause	М		9.2.1.5		-	
>RL Specific					_	
>>Unsuccessful RL Information Response		1			YES	ignore
>>>RL ID	М		9.2.1.49		_	
>>>Cause	М		9.2.1.5		_	
Criticality Diagnostics	0		9.2.1.13		YES	ignore

## 9.1.9 RADIO LINK DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		Ι	
RL Information		1 <maxnr OfRLs&gt;</maxnr 			EACH	notify
>RL ID	М		9.2.1.49		_	

Range bound	Explanation			
maxNrOfRLs	Maximum number of radio links for one UE			

## 9.1.10 RADIO LINK DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
Criticality Diagnostics	0		9.2.1.13		YES	ignore

# 9.1.11 RADIO LINK RECONFIGURATION PREPARE

#### 9.1.11.1 FDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
Magazara Turza	N4		Reference		VEO	reie et
Message Type Transaction ID	M		9.2.1.40		YES	reject
Allowed Queuing Time	M O		9.2.1.59 9.2.1.2		YES	raiaat
UL DPCH Information	0	01	9.2.1.2		YES	reject reject
>UL Scrambling Code	0	01	9.2.2.53		163	Tejeci
>UL Strambling Code >UL SIR Target	0		9.2.2.53 Uplink SIR			
	-		9.2.1.69		-	
>Min UL Channelisation Code Length	0		9.2.2.25		_	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.24		_	
>Puncture Limit	0		9.2.1.46	For the UL.	_	
>TFCS	0		9.2.1.63	TFCS for the UL.	_	
>UL DPCCH Slot Format	0		9.2.2.52	02.	_	
>Diversity Mode	0		9.2.2.8		_	
>Not Used	0		NULL		_	1
>Not Used	0		NULL		_	1
>UL DPDCH Indicator For E-DCH Operation	0		9.2.2.52A		YES	reject
DCH Operation	1	01			YES	reject
>TFCS	0	01	9.2.1.63	TFCS for the DL.	-	Tejeci
>DL DPCH Slot Format	0		9.2.2.9	DL.	_	
>Number of DL	0		9.2.2.9 9.2.2.26A			
Channelisation Codes	0		0.0.0.46			
>TFCI Signalling Mode >TFCI Presence	0 C-		9.2.2.46 9.2.1.55		_	
	SlotFormat				_	
>Multiplexing Position	0		9.2.2.26		-	
>Limited Power Increase	0		9.2.2.21A		_	
>DL DPCH Power Information		01			YES	reject
>>Power Offset		1			-	
Information						
>>>PO1	М		Power Offset 9.2.2.30	Power offset for the TFCI bits.	-	
>>>PO2	М		Power Offset 9.2.2.30	Power offset for the TPC bits.	_	
>>>PO3	М		Power Offset 9.2.2.30	Power offset for the pilot bits.	_	
>>FDD TPC Downlink Step Size	М		9.2.2.16		_	
>>Inner Loop DL PC Status	М		9.2.2.21a		_	
DCHs To Modify	0		FDD DCHs To Modify 9.2.2.13C		YES	reject
DCHs To Add	0		DCH FDD Information 9.2.2.4A		YES	reject
DCHs To Delete		0 <maxnrof DCHs&gt;</maxnrof 			GLOBAL	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>DCH ID	М		9.2.1.16		_	
RL Information		0 <maxnrof RLs&gt;</maxnrof 			EACH	reject
>RL ID	М		9.2.1.49		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.48		_	
>DL Reference Power	0		DL Power 9.2.1.21A	Power on DPCH.	YES	ignore
>RL Specific DCH Information	0		9.2.1.49A		YES	ignore
>DL DPCH Timing Adjustment	0		9.2.2.9A	Required RL Timing Adjustment.	YES	reject
>Phase Reference Update Indicator	0		9.2.2.27B		YES	ignore
>RL specific E-DCH Information	0		9.2.2.35a		YES	reject
>E-DCH RL Indication	0		9.2.2.4E		YES	reject
>HS-DSCH Preconfiguration Setup	0		9.2.2.100		YES	ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.124		YES	ignore
>Non-Serving RL Preconfiguration Removal	0		Non- Serving RL Preconfigu ration Setup 9.2.2.124		YES	ignore
>F-TPICH Information Reconf	0		9.2.2.142		YES	ignore
Transmission Gap Pattern Sequence Information	0		9.2.2.47A		YES	reject
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-DSCH Information To Modify	0		9.2.1.30Q		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.30OA		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.30OB		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.49		YES	reject
E-DPCH Information		01			YES	reject
>Maximum Set of E- DPDCHs	0		9.2.2.24e		-	
>Puncture Limit	0		9.2.1.46		_	
>E-TFCS Information	0		9.2.2.4G		_	
>E-TTI	0		9.2.2.4J		_	
>E-DPCCH Power Offset	0		9.2.2.4K		-	
>E-RGCH 2-Index-Step Threshold	0		9.2.2.64		-	
>E-RGCH 3-Index-Step Threshold	0		9.2.2.65		-	
>HARQ Info for E-DCH	0		9.2.2.66		-	
>HS-DSCH Configured	0		9.2.2.19C		_	

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Indicator						
>Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.102		YES	ignore
E-DCH FDD Information	0		9.2.2.4B		YES	reject
E-DCH FDD Information to Modify	0		9.2.2.4F		YES	reject
E-DCH MAC-d Flows to Add	0		E-DCH MAC-d flows Information 9.2.2.4MC		YES	reject
E-DCH MAC-d Flows to Delete	0		9.2.1.90		YES	reject
Serving E-DCH RL	0		9.2.2.38C		YES	reject
F-DPCH Information		01			YES	reject
>Power Offset		1			-	
Information						
>>PO2	М		Power Offset 9.2.2.30	This IE shall be ignored by DRNS.	_	
>FDD TPC Downlink Step Size	М		9.2.2.16		_	
>Limited Power Increase	М		9.2.2.21A		_	
>Inner Loop DL PC Status	M		9.2.2.21a		_	
>F-DPCH Slot Format Support Request	0		9.2.2.86		YES	reject
>F-DPCH Slot Format	0		9.2.2.85		YES	Ignore
Fast Reconfiguration Mode	0		9.2.2.70		YES	ignore
CPC Information	U	01	3.2.2.10		YES	reject
>Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.72		-	10,000
>Continuous Packet Connectivity DTX-DRX Information To Modify	0		9.2.2.73		-	
>Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.74		_	
>Continuous Packet Connectivity HS-SCCH less Deactivate Indicator	0		9.2.2.75A		YES	reject
Additional HS Cell Information RL Reconf Prep		0 <maxnrof HSDSCH-1&gt;</maxnrof 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>C-ID	0		9.2.1.6			
>HS-DSCH FDD Secondary Serving Information	0		9.2.2.19aa		-	
>HS-DSCH FDD Secondary Serving Information To Modify	0		9.2.2.19bb		-	
>HS-DSCH Secondary Serving Remove	0		NULL		_	
UE Aggregate Maximum Bit Rate	0		9.2.1.137		YES	ignore
Additional E-DCH Cell Information RL Reconf		01		For E-DCH on multiple	YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Prep				frequencies in this DRNS.		
>CHOICE Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency	М				YES	reject
>>Setup				Used when RLs on the secondary UL frequency does not exist or is not configured with E-DCH in the current UE context.	_	
>>>Multicell E-DCH Transport Bearer Mode	M		9.2.2.113		_	
>>>Additional E- DCH Cell Information Setup		1 <maxnrof EDCH-1&gt;</maxnrof 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	_	
>>>>Additional E- DCH FDD Setup Information	М		9.2.2.110		_	
>>Configuration Change >>>Additional E-		1 <maxnrof< td=""><td></td><td>Used when RLs with additional E- DCH on the secondary UL frequency exist in the current UE context and the configuration is modified (adding new RLs or modification of existing RLs). E-DCH on</td><td>_</td><td></td></maxnrof<>		Used when RLs with additional E- DCH on the secondary UL frequency exist in the current UE context and the configuration is modified (adding new RLs or modification of existing RLs). E-DCH on	_	
DCH Cell Information Configuration Change		1 <maxnrof EDCH-1&gt;</maxnrof 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	_	
>>>>Additional E- DCH Configuration Change Information	М		9.2.2.111		_	
>>Removal				Used when all RLs on the indicated	_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				secondary UL frequency is removed.		
>>>Additional E- DCH Cell Information Removal		1 <maxnrof EDCH-1&gt;</maxnrof 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	_	
>>>>RL on Secondary UL Frequency	М		ENUMERA TED (Remove, )	Removal of all RL on secondary UL frequency.	_	
UL CLTD Information Reconf	0		9.2.2.130		YES	reject

Condition	Explanation
CodeLen	The IE shall be present only if the Min UL
	Channelisation Code length IE equals to 4.
SlotFormat	The IE shall only 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 <i>Diversity Mode</i> IE is present
	in the UL DPCH Information IE and is not equal to
	"none".

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for a UE.
maxNrOfRLs	Maximum number of RLs for a UE.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE

## 9.1.11.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL CCTrCH To Add		0 <maxn rOfCCTr CHs&gt;</maxn 		For DCH and USCH.	EACH	notify
>CCTrCH ID	М		9.2.3.2		—	
>TFCS	М		9.2.1.63	For the UL.	_	
>TFCI Coding	Μ		9.2.3.11		_	
>Puncture Limit	М		9.2.1.46		—	
>UL SIR Target	0		Uplink SIR 9.2.1.69	Mandatory for 1.28Mcps TDD; not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>TDD TPC Uplink Step Size	0		9.2.3.10a	Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
UL CCTrCH To Modify		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
>TFCS	0		9.2.1.63	For the UL.	_	
>TFCI Coding	0		9.2.3.11		_	
>Puncture Limit	0		9.2.1.46		_	
>UL SIR Target	0		Uplink SIR 9.2.1.69	Applicable to 1.28Mcps TDD only.	YES	reject
>TDD TPC Uplink Step Size	0		9.2.3.10a	Applicable to 1.28Mcps TDD only.	YES	reject
UL CCTrCH to Delete		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	М		9.2.3.2		-	
DL CCTrCH To Add		0 <maxn rOfCCTr CHs&gt;</maxn 		For DCH and DSCH.	EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
>TFCS	М		9.2.1.63	For the DL.	_	
>TFCI Coding	М		9.2.3.11		_	
>Puncture Limit	М		9.2.1.46		-	
>TPC CCTrCH List		0 <maxn oCCTrC Hs&gt;</maxn 		List of uplink CCTrCH which provide TPC.	_	
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.2		_	
>TDD TPC Downlink Step Size	0		9.2.3.10		YES	reject
DL CCTrCH To Modify		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Criticality
>CCTrCH ID	М		9.2.3.2			
>TFCS	0		9.2.1.63	For the DL.		
>TFCI Coding	0		9.2.3.11			
>Puncture Limit	0		9.2.1.46			
>TPC CCTrCH List		0 <maxn oCCTrC Hs&gt;</maxn 	5.2.1.40	List of uplink CCTrCH which provide TPC.	_	
>>TPC CCTrCH ID	Μ		CCTrCH ID 9.2.3.2		-	
>TDD TPC Downlink Step Size	0		9.2.3.10		YES	reject
DL CCTrCH to Delete		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
DCHs To Modify	0		TDD DCHs To Modify 9.2.3.8B		YES	reject
DCHs To Add	0		DCH TDD Information 9.2.3.2A		YES	reject
DCHs to Delete		0 <maxn rOfDCHs &gt;</maxn 			GLOBAL	reject
>DCH ID	М		9.2.1.16		_	
DSCHs To Modify		0 <maxn oOfDSC Hs&gt;</maxn 			GLOBAL	reject
>DSCH ID	Μ		9.2.3.3ae		_	
>CCTrCH ID	0		9.2.3.2	DL CCTrCH in which the DSCH is mapped.	-	
>TrCH Source Statistics Descriptor	0		9.2.1.65		_	
>Transport Format Set	0		9.2.1.64		_	
>Allocation/Retention Priority	0		9.2.1.1		_	
>Scheduling Priority Indicator	0		9.2.1.51A		-	
>BLER	0		9.2.1.4		-	
>Transport Bearer Request Indicator	Μ		9.2.1.61		_	
>Traffic Class	0		9.2.1.58A		YES	ignore
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCHs To Add	0		DSCH TDD Information 9.2.3.3a		YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DSCHs to Delete		0 <maxn oOfDSC Hs&gt;</maxn 			GLOBAL	reject
>DSCH ID	Μ		9.2.3.3ae			
USCHs To Modify		0 <maxn oOfUSC Hs&gt;</maxn 			GLOBAL	reject
>USCH ID	Μ		9.2.3.14			
>CCTrCH ID	0		9.2.3.2	UL CCTrCH in which the USCH is mapped.	1	
>TrCH Source Statistics Descriptor	0		9.2.1.65		-	
>Transport Format Set	0		9.2.1.64		_	
>Allocation/Retention Priority	0		9.2.1.1		_	
>Scheduling Priority Indicator	0		9.2.1.51A		-	
>BLER	0		9.2.1.4		_	
>Transport Bearer Request Indicator	М		9.2.1.61		_	
>RB Info		0 <maxn oOfRB&gt;</maxn 		All Radio Bearers using this USCH	-	
>>RB Identity	Μ		9.2.3.5B		_	
>Traffic class	0		9.2.1.58A		YES	ignore
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.56A		YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
USCHs To Add	0		USCH Information 9.2.3.15		YES	reject
USCHs to Delete		0 <maxn oOfUSC Hs&gt;</maxn 			GLOBAL	reject
>USCH ID	М		9.2.3.14		-	
Primary CCPCH RSCP	0		9.2.3.5		YES	ignore
DL Time Slot ISCP Info	0		9.2.3.2D	Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	YES	ignore
DL Time Slot ISCP Info LCR	0		9.2.3.2F	Applicable to 1.28Mcps TDD only.	YES	ignore
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.3aa		YES	reject
HS-DSCH Information To Modify	0		9.2.1.30Q		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.30OA		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.30OB		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.49		YES	reject
PDSCH-RL-ID	0		RL ID 9.2.1.49		YES	ignore
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	М		9.2.3.13J		-	
>Uplink Synchronisation Frequency	М		9.2.3.131		-	
RL Information		0 <maxn rOfRLs.</maxn 			YES	ignore
>RL ID	М		9.2.1.49		_	
>RL Specific DCH Information	0		9.2.1.49A		-	
Primary CCPCH RSCP Delta	0		9.2.3.5a		YES	ignore
E-DCH Information		01		3.84Mcps TDD only.	YES	reject
>E-PUCH Information	0		9.2.3.36		-	
>E-TFCS Information TDD >E-DCH MAC-d Flows to	0		9.2.3.37 9.2.3.38		-	
Add >E-DCH MAC-d Flows to Delete	0		9.2.1.90		_	
>E-DCH TDD Information	0		9.2.3.40		_	
>E-DCH TDD Information to Modify	0		9.2.3.42		-	

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			-
E-DCH Serving RL	0		RL ID 9.2.1.49	3.84Mcps TDD only.	YES	reject
E-DCH Information 7.68Mcps		01		7.68Mcps TDD only.	YES	reject
>E-PUCH Information	0		9.2.3.36	í í	_	
>E-TFCS Information TDD	0		9.2.3.37		_	
>E-DCH MAC-d Flows to Add	0		9.2.3.38		-	
>E-DCH MAC-d Flows to Delete	0		9.2.1.90		-	
>E-DCH TDD Information 7.68Mcps	0		9.2.3.51		-	
>E-DCH TDD Information to	0		9.2.3.42		-	
Modify E-DCH Information		01		1.28Mcps	YES	reject
1.28Mcps			9.2.3.36a	TDD only.		
>E-PUCH Information LCR	0				_	
>E-TFCS Information TDD >E-DCH MAC-d Flows to	0		9.2.3.37		-	
>E-DCH MAC-d Flows to Add	0		9.2.3.38		-	
>E-DCH MAC-d Flows to Delete	0		9.2.1.90		-	
>E-DCH TDD Information LCR	0		9.2.3.40a		-	
>E-DCH TDD Information to Modify	0		9.2.3.42		_	
Need for Idle Interval	0		ENUMERA TED (True, False)	TDD only.	YES	ignore
CPC Information		01		1.28Mcps TDD only.	YES	reject
>Continuous Packet Connectivity DRX Information LCR	0		9.2.3.61		_	
<ul> <li>Continuous Packet</li> <li>Connectivity DRX</li> <li>Information To Modify LCR</li> </ul>	0		9.2.3.62		-	
>HS-DSCH Semi-Persistent scheduling Information LCR	0		9.2.3.64		_	
>HS-DSCH Semi-Persistent scheduling Information to modify LCR	0		9.2.3.65		_	
>HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR	0		9.2.3.70			
>E-DCH Semi-Persistent scheduling Information LCR	0		9.2.3.66		_	
>E-DCH Semi-Persistent scheduling Information to modify LCR	0		9.2.3.67			
>E-DCH Semi-Persistent scheduling Deactivate Indicator LCR	0		9.2.3.71		_	
RNTI Allocation Indicator	0		ENUMERA TED (True)	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Type indicator	0		9.2.3.76	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Reconf		01		Applicable for Multi-Carrier E-DCH Operation in 1.28 Mcps TDD only.	YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>CHOICE continue,Setup or Change	Μ				-	
>>continue					_	
>>Setup					-	
>>>Multi-Carrier E-DCH Transport Bearer Mode LCR	M		9.2.3.79		-	
>>>Multi-Carrier E-DCH Information LCR	Μ		9.2.3.77		-	
>>change					—	
>>>Multi-Carrier E-DCH Transport Bearer Mode LCR	0		9.2.3.79		_	
>>>Multi-Carrier E-DCH Information LCR	0		9.2.3.77		-	
>>>Removal UL Multi- Carrier info		0 <maxn rOfULCar riersLCR- 1&gt;</maxn 			_	
>>>>UARFCN	M		9.2.1.66	Corresponds to Nt TS 25.105 [17].	-	
MU-MIMO Indicator	0		9.2.3.82	1.28 Mcps TDD only.	YES	reject

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for a UE.
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.
maxNoOfDSCHs	Maximum number of DSCHs for one UE.
maxNoOfUSCHs	Maximum number of USCHs for one UE.
maxNrOfRLs	Maximum number of RLs for one UE
maxNrOfULCarriersLCR	Maximum number of uplink frequencies in Multi-
	Carrier E-DCH Operation.
maxNoOfRB	Maximum number of Radio Bearers for one UE.

## 9.1.12 RADIO LINK RECONFIGURATION READY

#### 9.1.12.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
RL Information Response		0 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	М		9.2.1.49		—	
>Maximum Uplink SIR	0		Uplink SIR 9.2.1.69		-	
>Minimum Uplink SIR	0		Uplink SIR 9.2.1.69		-	
>Maximum DL TX Power	0		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	0		DL Power 9.2.1.21A		_	
>Not Used	0		NULL		_	
>DL Code Information	0		FDD DL Code Information 9.2.2.14A		YES	ignore
>DCH Information Response	0		9.2.1.16A		YES	ignore
>Not Used	0		NULL		_	
>DL Power Balancing Updated Indicator	0		9.2.2.10D		YES	ignore
>Primary CPICH Usage For Channel Estimation	0		9.2.2.32A		YES	ignore
>Secondary CPICH Information Change	0		9.2.2.38B		YES	ignore
>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>F-TPICH Information Response	0		9.2.2.143		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH FDD Information Response 9.2.2.19b		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
Fast Reconfiguration Permission	0		9.2.2.71	FDD only.	YES	ignore
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	ignore
Additional HS Cell Information Response		0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS- DSCH cell. Max 7 in this	EACH	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				3GPP release.		
>HS-PDSCH RL ID	М		RL ID 9.2.1.49	Telease.	-	
>HS-DSCH-RNTI	М		9.2.1.30P		_	
>HS-DSCH FDD Secondary Serving Information Response	М		9.2.2.19ba		-	
Additional E-DCH Cell Information Response RLReconf		0 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	EACH	ignore
>Additional E-DCH FDD Information Response	0		9.2.2.120	For new E- DCH Radio Links on secondary carrier.	_	
>Additional Modified E- DCH FDD Information Response	0		9.2.2.121		_	

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for a UE.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

## 9.1.12.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
RL Information Response		0 <maxn rOfRLs&gt;</maxn 		See Note 1 below.	YES	ignore
>RL ID	М		9.2.1.49		_	
>Maximum Uplink SIR	0		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	0		Uplink SIR 9.2.1.69		-	
>Maximum DL TX Power	0		DL Power 9.2.1.21A		-	
>Minimum DL TX Power	0		DL Power 9.2.1.21A		_	
>Secondary CCPCH Info TDD	0		9.2.3.7B	Applicable to 3.84Mcps TDD only.	-	
>UL CCTrCH Information		0 <maxn rOfCCTr CHs&gt;</maxn 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М	1	9.2.3.2		-	
>>UL DPCH to be Added		01		Applicable to 3.84Mcps TDD only.	YES	ignore
>>>Repetition Period	Μ		9.2.3.7		-	
>>>Repetition Length	М		9.2.3.6		_	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>Rx Timing Deviation	0		9.2.3.7A		-	
>>>UL Timeslot Information	М		9.2.3.13C		-	
>>>Rx Timing Deviation 3.84 Mcps Extended	0		9.2.3.35		YES	Ignore
>>UL DPCH to be Modified		01			YES	ignore
>>>Repetition Period	0		9.2.3.7		_	
>>>Repetition Length	0		9.2.3.6		_	
>>>TDD DPCH Offset	0		9.2.3.8A		_	
>>>UL Timeslot Information		0 <maxn rOfTS&gt;</maxn 		Applicable to 3.84Mcps TDD only.	_	
>>>>Time Slot	М		9.2.1.56		_	
>>>>Midamble Shift And Burst Type	0		9.2.3.4		_	
>>>>TFCI Presence	0		9.2.1.55		-	
>>>>UL Code Information		0 <maxn rOfDPCH s&gt;</maxn 			_	
>>>>DPCH ID	М		9.2.3.3		-	
>>>>TDD Channelisation Code	0		9.2.3.8		_	
>>>UL Timeslot Information LCR		0 <maxn rOfTsLC R&gt;</maxn 		Applicable to 1.28Mcps TDD only.	GLOBAL	ignore
>>>>Time Slot LCR	М		9.2.3.12a		_	
>>>>Midamble	0		9.2.3.4C			

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Shift LCR						
>>>TFCI Presence	0		9.2.1.55		-	
>>>>UL Code Information LCR		0 <maxn rOfDPCH sLCR&gt;</maxn 			GLOBAL	ignore
>>>>DPCH ID	М		9.2.3.3		-	
>>>>TDD Channelisation Code LCR	0		9.2.3.8a		_	
>>>>TDD UL DPCH Time Slot Format LCR	0		9.2.3.10C		YES	reject
>>>UL Timeslot Information 7.68Mcps		0 <maxn rOfTS&gt;</maxn 		Applicable to 7.68Mcps TDD only.	GLOBAL	ignore
>>>>Time Slot	Μ		9.2.1.56		_	
>>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.23		_	
>>>>TFCI Presence	0		9.2.1.55		-	
>>>>UL Code Information 7.68Mcps		0 <maxn rOfDPCH s768&gt;</maxn 			GLOBAL	ignore
>>>>DPCH ID	М		9.2.3.3		_	
>>>>TDD Channelisation Code 7.68Mcps	0		9.2.3.25		_	
>>UL DPCH to be Deleted		0 <maxn rOfDPCH s&gt;</maxn 			GLOBAL	ignore
>>>DPCH ID	М		9.2.3.3		-	
>>UL DPCH to be Added LCR		01		Applicable to 1.28Mcps TDD only.	YES	ignore
>>>Repetition Period	М		9.2.3.7		-	
>>>Repetition Length	Μ		9.2.3.6		_	
>>>TDD DPCH Offset	М		9.2.3.8A		-	
>>>UL Timeslot Information LCR	Μ		9.2.3.13G		-	
>>UL DPCH to be Added 7.68Mcps		01		Applicable to 7.68Mcps TDD only.	YES	ignore
>>>Repetition Period	М		9.2.3.7		-	
>>>Repetition Length	М		9.2.3.6		-	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>Rx Timing Deviation 7.68Mcps	0		9.2.3.30		-	
>>>UL Timeslot Information 7.68Mcps	М		9.2.3.26		-	
>DL CCTrCH Information		0 <maxn rOfCCTr CHs&gt;</maxn 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		-	
>>DL DPCH to be Added		01		Applicable to 3.84Mcps TDD only.	YES	ignore
>>>Repetition Period	Μ		9.2.3.7		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>>Repetition Length	М		9.2.3.6		-	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>DL Timeslot	М		9.2.3.2C		_	
Information						
>>DL DPCH to be		01			YES	ignore
Modified						-
>>>Repetition Period	0		9.2.3.7		-	
>>>Repetition Length	0		9.2.3.6		-	
>>>TDD DPCH Offset	0		9.2.3.8A		-	
>>>DL Timeslot Information		0 <maxn rOfTS&gt;</maxn 		Applicable to 3.84Mcps TDD only.	_	
>>>>Time Slot	М		9.2.1.56		_	
>>>>Midamble Shift	0		9.2.3.4		_	
And Burst Type						
>>>>TFCI Presence	0		9.2.1.55		_	
>>>>DL Code Information		0 <maxn rOfDPCH s&gt;</maxn 			-	
>>>>DPCH ID	М	07	9.2.3.3		_	
>>>>TDD Channelisation Code	0		9.2.3.8		-	
>>>DL Timeslot Information LCR		0 <maxn rOfTsLC R&gt;</maxn 		Applicable to 1.28Mcps TDD only.	GLOBAL	ignore
>>>>Time Slot LCR	М		9.2.3.12a		-	
>>>>Midamble Shift LCR	0		9.2.3.4C		_	
>>>>TFCI Presence	0		9.2.1.55		—	
>>>>DL Code Information LCR		0 <maxn rOfDPCH sLCR&gt;</maxn 			GLOBAL	ignore
>>>>DPCH ID	М		9.2.3.3		_	
>>>>TDD Channelisation Code LCR	0		9.2.3.8a		_	
>>>>TDD DL DPCH Time Slot Format LCR	0		9.2.3.8E		YES	reject
>>>>Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH.	YES	ignore
>>>>Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	YES	ignore
>>>DL Timeslot Information 7.68Mcps		0 <maxn rOfTS&gt;</maxn 		Applicable to 7.68Mcps TDD only.	GLOBAL	ignore
>>>>Time Slot	М	T	9.2.1.56	Í	-	
>>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.23		-	
>>>TFCI Presence	0		9.2.1.55		_	<u> </u>
>>>DL Code Information		0 <maxn rOfDPCH s768&gt;</maxn 			-	
>>>>DPCH ID 7.68Mcps	М		9.2.3.34		_	
>>>>>TDD Channelisation Code 7.68Mcps	0		9.2.3.25		-	
>>DL DPCH to be		0 <maxn< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></maxn<>			GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Deleted		rOfDPCH				
>>>DPCH ID	M	S>	9.2.3.3			
>>DL DPCH to be Deleted 7.68Mcps TDD		0 <maxn rOfDPCH s768&gt;</maxn 	9.2.0.0		GLOBAL	ignore
>>>DPCH ID 7.68Mcps	М		9.2.3.34		_	
>>DL DPCH to be Added LCR		01		Applicable to 1.28Mcps TDD only.	YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		-	
>>>TDD DPCH Offset	M		9.2.3.8A		-	
>>>DL Timeslot Information LCR	М		9.2.3.2E		-	
>>DL DPCH to be Added 7.68Mcps		01		Applicable to 7.68Mcps TDD only.	YES	ignore
>>>Repetition Period	М		9.2.3.7		-	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot Information 7.68Mcps	M		9.2.3.28		-	
>>CCTrCH Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	YES	ignore
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	YES	ignore
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DSCH to be Added or Modified		0 <maxnoo f DSCHs&gt;</maxnoo 			GLOBAL	ignore
>>DSCH ID	М	2001102	9.2.3.3ae		_	
>>Transport Format Management	М		9.2.3.13		-	
>DSCH Flow Control Information	М		9.2.3.3ag		_	
>>Binding ID	0		9.2.1.3		—	
>>Transport Layer Address	0		9.2.1.62		_	
>USCH to be Added or Modified		0 <maxno OfUSCH s&gt;</maxno 			GLOBAL	ignore
>>USCH ID	М	-	9.2.3.14		-	
>>Transport Format Management	M		9.2.3.13		_	
>>Binding ID	0		9.2.1.3		-	
>>Transport Layer Address	ō		9.2.1.62		-	
>Uplink Timing Advance Control LCR	0		9.2.3.13K	Applicable to 1.28Mcps TDD only.	YES	ignore

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IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>Secondary CCPCH Info TDD LCR	0		9.2.3.7F	Applicable to 1.28Mcps TDD only.	YES	ignore
>Secondary CCPCH Info 7.68Mcps TDD	0		9.2.3.22	Applicable to 7.68Mcps TDD only.	YES	ignore
>UARFCN	0		9.2.1.66	Applicable to 1.28Mcps TDD only. Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt (3GPP TS 25.105).	YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH TDD Information Response 9.2.3.3ab		YES	ignore
DSCH-RNTI	0		9.2.3.3ah		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
E-DCH Information Response	0		E-DCH TDD Information Response 9.2.3.41	3.84Mcps TDD only.	YES	ignore
E-DCH Information Response 7.68Mcps	0		E-DCH TDD Information Response 7.68Mcps 9.2.3.52	7.68Mcps TDD only.	YES	ignore
E-DCH Information Response 1.28Mcps	0		E-DCH TDD Information Response 1.28Mcps 9.2.3.41a	1.28Mcps TDD only.	YES	ignore
PowerControl GAP	0		INTEGER (1255)	1.28Mcps TDD only.	YES	ignore
Idle Interval Information	0		9.2.3.60	TDD only	YES	ignore
Continuous Packet Connectivity DRX Information Response LCR	0		9.2.3.63	1.28 Mcps TDD only.	YES	ignore
HS-DSCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.68	1.28 Mcps TDD only.	YES	ignore
E-DCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.69	1.28 Mcps TDD only.	YES	ignore
E-RNTI for FACH	0		E-RNTI 9.2.1.94	1.28 Mcps TDD only.	YES	ignore
H-RNTI for FACH	0		HS-DSCH- RNTI 9.2.1.30P	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Occasion Information	0		9.2.3.75	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Response LCR	0		9.2.3.78	1.28 Mcps TDD only.	YES	ignore
MU-MIMO Information	0		9.2.3.81	1.28 Mcps TDD	YES	reject

IE	/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality		
					only.				
Note 1:									

Range bound	Explanation
maxNoOfDSCHs	Maximum number of DSCHs for one UE.
maxNoOfUSCHs	Maximum number of USCHs for one UE.
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.
maxNrOfTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxNrOfDPCHs	Maximum number of DPCH for a UE for 3.84Mcps TDD.
maxNrOfTsLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.
maxNrOfDPCHsLCR	Maximum number of DPCH for a UE for 1.28Mcps TDD.
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfDPCHs768	Maximum number of DPCH for a UE for 7.68Mcps TDD.

#### 9.1.13 RADIO LINK RECONFIGURATION COMMIT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		_	
CFN	М		9.2.1.9		YES	ignore
Active Pattern Sequence Information	0		9.2.2.A	FDD only.	YES	ignore
Fast Reconfiguration Mode	0		9.2.2.70	FDD only.	YES	reject

#### 9.1.14 RADIO LINK RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
CHOICE Cause Level	М				YES	ignore
>General					-	
>>Cause	М		9.2.1.5		-	
>RL Specific					-	
>>RLs Causing Reconfiguration Failure		0 <maxnrof RLs&gt;</maxnrof 			EACH	ignore
>>>RL ID	М		9.2.1.49		-	
>>>Cause	М		9.2.1.5		_	
>>>Max UE DTX Cycle	C-DTX- CycleNotA vailable		9.2.2.87		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

Condition	Explanation
DTX-CycleNotAvailable	The IE shall be present if the Cause IE is set to "Continuous Packet
	Connectivity UE DTX Cycle not Available ".

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for a UE.

#### 9.1.15 RADIO LINK RECONFIGURATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	

## 9.1.16 RADIO LINK RECONFIGURATION REQUEST

#### 9.1.16.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.63	TFCS for the UL.	_	
>UL DPDCH Indicator For E-DCH Operation	0		9.2.2.52A		YES	reject
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.63	TFCS for the DL.	-	
>TFCI Signalling Mode	0		9.2.2.46		_	
>Limited Power Increase	0		9.2.2.21A		_	
DCHs To Modify	0		FDD DCHs To Modify 9.2.2.13C		YES	reject
DCHs To Add	0		DCH FDD Information 9.2.2.4A		YES	reject
DCHs To Delete		0 <maxnr OfDCHs&gt;</maxnr 			GLOBAL	reject
>DCH ID	М		9.2.1.16		-	
Transmission Gap Pattern Sequence Information	0		9.2.2.47A		YES	reject
RL Information		0 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	М		9.2.1.49		-	
>RL Specific DCH Information	0		9.2.1.49A		_	
>RL specific E-DCH Information	0		9.2.2.35a		YES	reject
>E-DCH RL Indication	0		9.2.2.4E		YES	reject
>HS-DSCH Preconfiguration Setup	0		9.2.2.100		YES	ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.124		YES	ignore
>Non-Serving RL Preconfiguration Removal	0		Non- Serving RL Preconfigu ration Setup 9.2.2.124		YES	ignore
>F-TPICH Information Reconf	0		9.2.2.142		YES	ignore
DL Reference Power Information	0		9.2.2.10C		YES	ignore
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-DSCH Information To Modify Unsynchronised	0		9.2.1.30NA		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.30OA		YES	reject

HS-DSCH MAC-d Flows To Delete	0		9.2.1.30OB		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.49		YES	reject
E-DPCH Information		01			YES	reject
>Maximum Set of E- DPDCHs	0		9.2.2.24e		-	
>Puncture Limit	0		9.2.1.46		_	
>E-TFCS Information	0		9.2.2.4G		-	
>E-TTI	0		9.2.2.4J		_	
>E-DPCCH Power Offset	0		9.2.2.4K		_	
>E-RGCH 2-Index-Step Threshold	0		9.2.2.64		_	
>E-RGCH 3-Index-Step Threshold	0		9.2.2.65		_	
>HARQ Info for E-DCH	0		9.2.2.66			
>Minimum Reduced E-	0	+	9.2.2.00		YES	ignoro
DPDCH Gain Factor			9.2.2.102		1E9	ignore
>HS-DSCH Configured Indicator	0		9.2.2.19C		_	
E-DCH FDD Information	0		9.2.2.4B		YES	reject
E-DCH FDD Information to	0		9.2.2.4F		YES	reject
Modify	U		5.2.2.41		120	reject
E-DCH MAC-d Flows to Add	0		E-DCH MAC-d flows		YES	reject
			Information 9.2.2.4MC		VEO	reient
E-DCH MAC-d Flows to Delete	0		9.2.1.90		YES	reject
Serving E-DCH RL	0		9.2.2.38C		YES	reject
CPC Information		01			YES	reject
>Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.72		_	
>Continuous Packet Connectivity DTX-DRX Information To Modify	0		9.2.2.73		_	
>Continuous Packet	0		9.2.2.74		-	
Connectivity HS-SCCH less Information						
>Continuous Packet Connectivity HS-SCCH less Deactivate Indicator	0		9.2.2.75A		YES	reject
No of Target Cell HS-SCCH Order	0		INTEGER (130)		YES	ignore
Additional HS Cell Information RL Reconf Req		0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS- DSCH cell. Max 7 in this	EACH	reject
>HS-PDSCH RL ID	M		RL ID	3GPP release.	_	
			9.2.1.49			
>C-ID	0		9.2.1.6		_	
>HS-DSCH FDD Secondary Serving	0		9.2.2.19aa		-	
Information >HS-DSCH FDD	0		9.2.2.19bc		_	
Secondary Serving						

Information To Modify						
Unsynchronised >HS-DSCH Secondary	0	+	NULL	+		
Serving Remove	0		NULL		—	
UE Aggregate Maximum Bit	0		9.2.1.137		YES	ignore
Rate	0		9.2.1.137		TL5	ignore
Additional E-DCH Cell Information RL Reconf Req		01		For E-DCH on multiple frequencies	YES	reject
0110105.0				in this DRNS.		
>CHOICE Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency	M				YES	reject
>>Setup				Used when	-	
				RLs on the secondary UL		
				frequency does not exist or is		
				not configured		
				with E-DCH in the current UE context.		
>>>Multicell E-DCH	М		9.2.2.113		_	
Transport Bearer Mode >>>Additional E-DCH		1 <maxnr< td=""><td></td><td>E-DCH on</td><td></td><td></td></maxnr<>		E-DCH on		
Cell Information		OfEDCH-		Secondary	—	
Setup		1>		uplink		
octup		12		frequency –		
				max 1 in this		
				3GPP		
				release.		
>>>Additional E- DCH FDD Setup Information	М		9.2.2.110		-	
>>Configuration Change				Used when	-	
				RLs with		
				additional E-		
				DCH on the		
				secondary		
				UL		
				frequency		
				exist in the		
				current UE		
				context and the		
				configuration		
				is modified		
				(adding new		
				RLs or		
				modification		
				of existing		
				RLs).		
>>>Additional E-DCH		1 <maxnr< td=""><td></td><td>E-DCH on</td><td>—</td><td></td></maxnr<>		E-DCH on	—	
Cell Information		OfEDCH-		Secondary		
Configuration Change		1>		uplink		
				frequency – max 1 in this		
				3GPP		
				release.		
>>>>Additional E-	М		9.2.2.111		_	
DCH Configuration						
Change Information						
>>Removal				Used when	—	

				all RLs on the indicated secondary UL frequency is removed.		
>>>Additional E-DCH Cell Information Removal		1 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	_	
>>>>RL on Secondary UL Frequency	М		ENUMERA TED (Remove, )	Removal of all RL on secondary UL frequency.	_	
UL CLTD Information Reconf	0		9.2.2.130		YES	reject

Range Bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.
maxNrOfRLs	Maximum number of RLs for a UE.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH
	cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH
	for one UE

## 9.1.16.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL CCTrCH Information To Modify		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	М		9.2.3.2		—	
>TFCS	0		9.2.1.63		_	
>UL SIR Target	0		Uplink SIR 9.2.1.69	Applicable to 1.28Mcps TDD only.	YES	reject
UL CCTrCH Information to Delete		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
DL CCTrCH Information To Modify		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
>TFCS	0		9.2.1.63		-	
DL CCTrCH Information to Delete		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	М		9.2.3.2		—	
DCHs To Modify	0		TDD DCHs To Modify 9.2.3.8B		YES	reject
DCHs To Add	0		DCH TDD Information 9.2.3.2A		YES	reject
DCHs to Delete		0 <maxn rOfDCHs &gt;</maxn 			GLOBAL	reject
>DCH ID	М		9.2.1.16		_	
RL Information		0 <maxn rOfRLs&gt;</maxn 			YES	ignore
>RL ID	М		9.2.1.49		-	
>RL Specific DCH Information	0		9.2.1.49A		-	
UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>Uplink Synchronisation Step Size	М		9.2.3.13J		-	
>Uplink Synchronisation Frequency	М		9.2.3.131		_	
HS-DSCH Information	0		HS-DSCH TDD Information9. 2.3.3aa		YES	reject
HS-DSCH Information To Modify Unsynchronised	0		9.2.1.30NA		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.30OA		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.30OB		YES	reject
HS-PDSCH RL ID	0		RL ID		YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			9.2.1.49			
E-DCH Information		01		3.84Mcps TDD only.	YES	reject
>E-PUCH Information	0		9.2.3.36		-	
>E-TFCS Information TDD	0		9.2.3.37		-	
>E-DCH MAC-d Flows to Add	0		9.2.3.38		-	
>E-DCH MAC-d Flows to Delete	0		9.2.1.90		-	
>E-DCH TDD Information	0		9.2.3.40		-	
>E-DCH TDD Information to Modify	0		9.2.3.42		-	
E-DCH Serving RL	0		RL ID 9.2.1.49	3.84Mcps TDD only.	YES	reject
E-DCH Information 7.68Mcps		01		7.68Mcps TDD only.	YES	reject
>E-PUCH Information	0		9.2.3.36	TDD only.	_	
>E-TFCS Information TDD	0		9.2.3.37			
>E-DCH MAC-d Flows to	0		9.2.3.38		_	<u> </u>
Add >E-DCH MAC-d Flows to	0		9.2.1.90		_	
Delete	0				_	
>E-DCH TDD Information 7.68Mcps	_		9.2.3.51		-	
>E-DCH TDD Information to Modify	0		9.2.3.42		-	
E-DCH Information 1.28Mcps		01		1.28Mcps TDD only.	YES	reject
>E-PUCH Information LCR	0		9.2.3.36a		—	
>E-TFCS Information TDD	0		9.2.3.37		—	
>E-DCH MAC-d Flows to Add	0		9.2.3.38		-	
>E-DCH MAC-d Flows to Delete	0		9.2.1.90		-	
>E-DCH TDD Information LCR	0		9.2.3.40a		_	
>E-DCH TDD Information to Modify	0		9.2.3.42		-	
Need for Idle Interval	0		ENUMERAT ED (True, False)	TDD only.	YES	ignore
CPC Information		01			YES	reject
>Continuous Packet Connectivity DRX Information LCR	0		9.2.3.61		_	
Continuous Packet     Connectivity DRX     Information To Modify LCR	0		9.2.3.62		_	
>HS-DSCH Semi-Persistent scheduling Information LCR	0		9.2.3.64		_	
>HS-DSCH Semi-Persistent scheduling Information to modify LCR	0		9.2.3.65		_	
>HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR	0		9.2.3.70		_	
>E-DCH Semi-Persistent scheduling Information LCR	0		9.2.3.66		_	
<ul> <li>&gt;E-DCH Semi-Persistent scheduling Information to modify LCR</li> </ul>	0		9.2.3.67		_	
>E-DCH Semi-Persistent scheduling Deactivate Indicator LCR	0		9.2.3.71		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
RNTI Allocation Indicator	0		ENUMERAT ED (True)	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Type indicator	0		9.2.3.76	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Reconf		01		Applicable for Multi-Carrier E-DCH Operation in 1.28 Mcps TDD only.	YES	reject
>CHOICE continue,Setup or Change	Μ				_	
>>continue					-	
>>Setup					-	
>>>Multi-Carrier E-DCH Transport Bearer Mode LCR	М		9.2.3.79		-	
>>>Multi-Carrier E-DCH Information LCR	М		9.2.3.77		-	
>>Change					-	
>>>Multi-Carrier E-DCH Transport Bearer Mode LCR	0		9.2.3.79		-	
>>>Multi-Carrier E-DCH Information LCR	0		9.2.3.77		_	
>>>Removal UL Multi- Carrier info		0 <maxn rOfULCar riersLCR- 1&gt;</maxn 			-	
>>>>UARFCN	М		9.2.1.66	Corresponds to Nt TS 25.105 [17].	-	
MU-MIMO Indicator	0		9.2.3.82	1.28 Mcps TDD only.	YES	reject

Range Bound	Explanation
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.
maxNrOfDCHs	Maximum number of DCHs for one UE.
maxNrOfRLs	Maximum number of RLs for one UE
maxNrOfULCarriersLCR	Maximum number of uplink frequencis in Multi-Carrier
	E-DCH Operation.

## 9.1.17 RADIO LINK RECONFIGURATION RESPONSE

#### 9.1.17.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	·
RL Information Response		0 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	М		9.2.1.49			
>Maximum Uplink SIR	0		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	0		Uplink SIR 9.2.1.69		-	
>Maximum DL TX Power	0		DL Power 9.2.1.21A		-	
>Minimum DL TX Power	0		DL Power 9.2.1.21A		_	
>Not Used	0		NULL		Ι	
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DL Code Information	0		FDD DL Code Information 9.2.2.14A		YES	ignore
>DL Power Balancing Updated Indicator	0		9.2.2.10D		YES	ignore
>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>F-TPICH Information Response	0		9.2.2.143		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH FDD Information Response 9.2.2.19b		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	Ignore
Additional HS Cell Information Response		0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		-	
>HS-DSCH-RNTI	М		9.2.1.30P		_	
>HS-DSCH FDD	М		9.2.2.19ba		_	
Secondary Serving						

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Information Response						
Additional E-DCH Cell Information Response RLReconf		0 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	EACH	ignore
>Additional E-DCH FDD Information Response	0		9.2.2.120	For new E- DCH Radio Links on secondary carrier.	_	
>Additional Modified E- DCH FDD Information Response	0		9.2.2.121		-	

Range Bound	Explanation
maxNrOfRLs	Maximum number of RLs for a UE.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

## 9.1.17.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40	•	YES	reject
Transaction ID	М		9.2.1.59		_	,
RL Information Response		0 <max NrOfRL s&gt;</max 		See note 1 below.	YES	ignore
>RL ID	Μ		9.2.1.49		_	
>Maximum Uplink SIR	0		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	0		Uplink SIR 9.2.1.69		-	
>Maximum DL TX Power	0		DL Power 9.2.1.21A		-	
>Minimum DL TX Power	0		DL Power 9.2.1.21A		-	
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DL CCTrCH Information		0 <max NrOfCC TrCHs&gt;</max 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	<b> </b>
>>DL DPCH To Modify LCR		01		Applicable to 1.28Mcps TDD only.	YES	ignore
>>>DL Timeslot Information LCR		0 <max NrOfTsL CR&gt;</max 			_	
>>>>Time Slot LCR	Μ		9.2.3.12a		-	
>>>>Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH.	-	
>>>>Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	_	
>>CCTrCH Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	YES	ignore
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	YES	ignore
>Uplink Timing Advance Control LCR	0		9.2.3.13K	Applicable to 1.28Mcps TDD only.	YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH TDD Information Response 9.2.3.3ab		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.34B	1	YES	ignore
E-DCH Information Response	0		E-DCH TDD	3.84Mcps	YES	ignore
			Information	TDD only.	-	0

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			Response 9.2.3.41			
E-DCH Information Response 7.68Mcps	0		E-DCH TDD Information Response 7.68Mcps 9.2.3.52	7.68Mcps TDD only.	YES	ignore
E-DCH Information Response 1.28Mcps	0		E-DCH TDD Information Response 1.28Mcps 9.2.3.41a	1.28Mcps TDD only.	YES	ignore
PowerControl GAP	0		INTEGER (1255)	1.28Mcps TDD only.	YES	ignore
Idle Interval Information	0		9.2.3.60	TDD only.	YES	ignore
Continuous Packet Connectivity DRX Information Response LCR	0		9.2.3.63	1.28 Mcps TDD only.	YES	ignore
HS-DSCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.68	1.28 Mcps TDD only.	YES	ignore
E-DCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.69	1.28 Mcps TDD only.	YES	ignore
E-RNTI for FACH	0		E-RNTI 9.2.1.94	1.28 Mcps TDD only.	YES	ignore
H-RNTI for FACH	0		HS-DSCH- RNTI 9.2.1.30P	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Occasion Information	0		9.2.3.75	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Response LCR	0		9.2.3.78	1.28 Mcps TDD only.	YES	ignore
MU-MIMO Information	0		9.2.3.81	1.28 Mcps TDD only.	YES	reject
Note 1: This information eler maxNrOfRLs are rep						on 2 through

Range bound	Explanation
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.
maxNrOfTsLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.
maxNrOfRLs	Maximum number of RLs for one UE.

# 9.1.18 RADIO LINK FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
CHOICE Reporting Object	M			Object for which the Failure shall be reported.	YES	ignore
>RL					_	
>>RL Information		1 <maxnrof RLs&gt;</maxnrof 			EACH	ignore
>>>RL ID	М		9.2.1.49		_	
>>>Cause	М		9.2.1.5		_	
>RLS				FDD only.	-	
>>RL Set Information		1 <maxnrof RLSets&gt;</maxnrof 			EACH	ignore
>>>RL Set ID	М		9.2.2.35		_	
>>>Cause	М		9.2.1.5		_	
>CCTrCH				TDD only.		
>>RL ID	М		9.2.1.49		-	
>>CCTrCH List		1 <maxnoc CTrCHs&gt;</maxnoc 			EACH	ignore
>>>CCTrCH ID	М		9.2.3.2		-	
>>>Cause	М		9.2.1.5		-	

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfRLSets	Maximum number of RL Sets for one UE.
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.

## 9.1.19 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	. 0
CHOICE Reporting Object	M			Object for which the Restoration shall be reported.	YES	ignore
>RL				TDD only.	_	
>>RL Information		1 <max NrOfRL s&gt;</max 			EACH	ignore
>>>RL ID	М		9.2.1.49		_	
>RLS				FDD only.	_	
>>RL Set Information		1 <max NrOfRL Sets&gt;</max 			EACH	ignore
>>>RL Set ID	М		9.2.2.35		_	
>CCTrCH				TDD only.		
>>RL ID	М		9.2.1.49		_	
>>CCTrCH List		1 <max noCCTr CHs&gt;</max 			EACH	ignore
>>>CCTrCH ID	М		9.2.3.2			

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Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfRLSets	Maximum number of RL Sets for one UE.
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.

## 9.1.20 DL POWER CONTROL REQUEST [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
Power Adjustment Type	М		9.2.2.28		YES	ignore
DL Reference Power	C- Common		DL Power 9.2.1.21A		YES	ignore
Inner Loop DL PC Status	0		9.2.2.21a		YES	ignore
DL Reference Power Information	C- Individual	1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	М		9.2.1.49		-	
>DL Reference Power	М		DL Power 9.2.1.21A		_	
Max Adjustment Step	C- CommonO rIndividual		9.2.2.23		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 <i>Power Adjustment Type</i> IE is set to "Common".
Individual	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Individual".
CommonOrIndividual	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Common" or "Individual".

Range Bound	Explanation			
maxNrOfRLs	Maximum number of RLs for one UE.			

## 9.1.21 PHYSICAL CHANNEL RECONFIGURATION REQUEST

#### 9.1.21.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	Μ		9.2.1.59		_	
RL Information		1			YES	reject
>RL ID	М		9.2.1.49		_	
>DL Code Information	М		FDD DL Code Information 9.2.2.14A		YES	notify
>F-DPCH Slot Format	0		9.2.2.85		YES	Ignore
>F-TPICH Reconfiguration Information	0		9.2.2.144		YES	ignore

## 9.1.21.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
RL Information		1			YES	reject
>RL ID	М		9.2.1.49		-	
>UL CCTrCH Information		0 <maxnrof CCTrCHs&gt;</maxnrof 			GLOBAL	reject
>>CCTrCH ID	М		9.2.3.2			
>>UL DPCH Information		1			YES	notify
>>>Repetition Period	0		9.2.3.7		-	
>>>Repetition Length	0		9.2.3.6		_	
>>>TDD DPCH Offset	0		9.2.3.8A		-	
>>>UL Timeslot Information		0 <maxnr OfTS&gt;</maxnr 		Applicable to 3.84Mcps TDD only.	-	
>>>>Time Slot	М		9.2.1.56		-	
>>>>Midamble Shift And Burst Type	0		9.2.3.4		-	
>>>>TFCI Presence	0	1	9.2.1.55		_	
>>>>UL Code Information	0		TDD UL Code Information 9.2.3.10A		_	
>>>UL Timeslot Information LCR		0 <maxnr OfTsLCR&gt;</maxnr 		Applicable to 1.28Mcps TDD only.	GLOBAL	reject
>>>>Time Slot LCR	Μ		9.2.3.12a		_	
>>>>Midamble Shift LCR	0		9.2.3.4C		-	
>>>>TFCI Presence	0		9.2.1.55		_	
>>>>UL Code Information LCR	0		TDD UL Code Information LCR 9.2.3.10B		_	
>>>PLCCH Information	0		9.2.3.17		YES	Reject
>>>UL Timeslot Information 7.68Mcps		0 <maxnr OfTS&gt;</maxnr 		Applicable to 7.68Mcps TDD only.	GLOBAL	reject
>>>>Time Slot	М		9.2.1.56			
>>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.23		-	
>>>>TFCI Presence	0	ļ	9.2.1.55		-	
>>>>UL Code Information 7.68Mcps	0		TDD UL Code Information 9.2.3.27		_	
>DL CCTrCH Information		0 <maxnr OfCCTrCH s&gt;</maxnr 			GLOBAL	reject
>>CCTrCH ID	М		9.2.3.2		_	
>>DL DPCH Information		1			YES	notify
>>>Repetition Period	0		9.2.3.7		Ι	<b>_</b>
>>>Repetition Length	0		9.2.3.6		-	
>>>TDD DPCH Offset	0		9.2.3.8A		Ι	
>>>DL Timeslot Information		0 <maxnr OfTS&gt;</maxnr 		Applicable to 3.84Mcps TDD only.	-	
>>>>Time Slot	М		9.2.1.56		_	
>>>>Midamble Shift	0		9.2.3.4		-	

And Burst Type						
>>>TFCI Presence	0		9.2.1.55		_	
>>>>DL Code Information	0		TDD DL Code Information 9.2.3.8C		-	
>>>DL Timeslot Information LCR		0 <maxnr OfTsLCR&gt;</maxnr 		Applicable to 1.28Mcps TDD only.	GLOBAL	reject
>>>>Time Slot LCR	М		9.2.3.12a		_	
>>>>Midamble Shift LCR	0		9.2.3.4C		_	
>>>>TFCI Presence	0		9.2.1.55		_	
>>>>DL Code Information LCR	0		TDD DL Code Information LCR 9.2.3.8D		-	
>>>DL Timeslot Information 7.68Mcps		0 <maxnr OfTS&gt;</maxnr 		Applicable to 7.68Mcps TDD only.	GLOBAL	reject
>>>>Time Slot	М		9.2.1.56		-	
>>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.23		-	
>>>>TFCI Presence	0		9.2.1.55		-	
>>>>DL Code Information 7.68Mcps	0		TDD DL Code Information 7.68Mcps 9.2.3.29		-	
>HS-PDSCH Timeslot Specific Information		0 <maxnr OfDLTs&gt;</maxnr 		Applicable to 3.84Mcps TDD only.	GLOBAL	reject
>>Time Slot	М		9.2.1.56		—	
>>Midamble Shift And Burst Type	Μ		9.2.3.4		_	
>HS-PDSCH Timeslot Specific Information LCR		0 <maxnr OfDLTsLC R&gt;</maxnr 		Applicable to 1.28Mcps TDD only.	GLOBAL	reject
>>Time Slot LCR	М		9.2.3.12a		-	
>>Midamble Shift LCR	М		9.2.3.4C		-	
>HS-PDSCH Timeslot Specific Information 7.68Mcps		0 <maxnr OfDLTs&gt;</maxnr 		Applicable to 7.68Mcps TDD only.	GLOBAL	reject
>>Time Slot	М		9.2.1.56		_	
>>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23		-	
>UARFCN	0		9.2.1.66	Applicable to 1.28Mcps TDD only.	YES	ignore

Range bound	Explanation
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.
maxNrOfTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxNrOfTsLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.
maxNrOfDLTs	Maximum number of downlink time slots per Radio Link for 3.84Mcps TDD or 7.68Mcps TDD.
maxNrOfDLTsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.

## 9.1.22 PHYSICAL CHANNEL RECONFIGURATION COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	Μ		9.2.1.59		-	
CFN	Μ		9.2.1.9		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

#### 9.1.23 PHYSICAL CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
Cause	М		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

#### 9.1.24 UPLINK SIGNALLING TRANSFER INDICATION

#### 9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		125	ignore
UC-ID	M		9.2.1.71		YES	ignore
SAI	M		9.2.1.52		YES	ignore
Cell GAI	0		9.2.1.5A		YES	ignore
C-RNTI	M		9.2.1.14		YES	ignore
S-RNTI	M		9.2.1.53	If the Extended S- RNT/ IE is included in the message, the S-RNT/ IE shall be ignored.	YES	ignore
D-RNTI	0		9.2.1.24		YES	ignore
Propagation Delay	Μ		9.2.2.33		YES	ignore
STTD Support Indicator	Μ		9.2.2.45		YES	ignore
Closed Loop Mode1 Support Indicator	М		9.2.2.2		YES	ignore
L3 Information	Μ		9.2.1.32		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0		9.2.1.11		YES	ignore
URA Information	0		9.2.1.70B		YES	ignore
Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
DPC Mode Change Support Indicator	0		9.2.2.56		YES	ignore
Common Transport Channel Resources Initialisation Not Required	0		9.2.1.12F		YES	Ignore

Cell Capability Container FDD	0		9.2.2.D		YES	ignore
SNA Information	0		9.2.1.52Ca		YES	ignore
Cell Portion ID	0		9.2.2.E		YES	ignore
Active MBMS Bearer Service List		0 <max NrOfActi veMBMS Services &gt;</max 			GLOBAL	ignore
>TMGI	М		9.2.1.80		_	
>Transmission Mode	M		9.2.1.81		_	
Inter-frequency Cell List		0 <max CellsMe as&gt;</max 			GLOBAL	ignore
>DL UARFCN	М		UARFCN 9.2.1.66		_	
>UL UARFCN	0		UARFCN 9.2.1.66		-	
>Primary Scrambling Code	М		9.2.1.45		_	
Extended Propagation Delay	0		9.2.2.33a		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
Multiple PLMN List	0		9.2.1.117		YES	ignore
E-RNTI	0		9.2.1.94		YES	ignore
Max UE DTX Cycle	C-DTX- DRXCapab ility		9.2.2.87		YES	ignore
Cell Capability Container Extension FDD	0		9.2.2.123		YES	ignore
Secondary Serving Cell List	0		9.2.2.101		YES	ignore
Dual Band Secondary Serving Cell List	0		Secondary Serving Cell List 9.2.2.101		YES	ignore
Extended S-RNTI	0		9.2.1.154	The Extended S- RNT/ IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

Condition	Explanation
DTX-DRXCapability	The IE shall be present if the Continuous Packet Connectivity DTX-DRX
	Support Indicator IE in Cell Capability Container FDD IE is set to 1.

Range bound	Explanation
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.
maxCellsMeas	Maximum number of inter-frequency cells measured by a UE.

# 9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		_	
UC-ID	Μ		9.2.1.71		YES	ignore
SAI	Μ		9.2.1.52		YES	ignore
Cell GAI	0		9.2.1.5A		YES	Ignore
C-RNTI	Μ		9.2.1.14		YES	ignore
S-RNTI	М		9.2.1.53	If the Extended S- RNT/ IE is included in the message, the S-RNT/ IE shall be ignored.	YES	ignore
D-RNTI	0		9.2.1.24		YES	ignore
Rx Timing Deviation	Μ		9.2.3.7A		YES	ignore
L3 Information	Μ		9.2.1.32		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0	1	9.2.1.11		YES	ignore
URA Information	0		9.2.1.70B		YES	ignore
Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
Common Transport Channel Resources Initialisation Not Required	0		9.2.1.12F		YES	ignore
Cell Capability Container TDD	0		9.2.3.1a	Applicable to 3.84Mcps TDD only.	YES	ignore
Cell Capability Container TDD LCR	0		9.2.3.1b	Applicable to 1.28Mcps TDD only.	YES	ignore
SNA Information	0		9.2.1.52Ca		YES	ignore
Active MBMS Bearer Service List		0 <max NrOfActi veMBMS Services &gt;</max 			GLOBAL	ignore
>TMGI	Μ		9.2.1.80		_	
>Transmission Mode	Μ		9.2.1.81		_	
Cell Capability Container 7.68Mcps TDD	0		9.2.3.31	Applicable to 7.68Mcps TDD only.	YES	ignore
Rx Timing Deviation 7.68Mcps	0		9.2.3.30	Applicable to 7.68Mcps TDD only.	YES	ignore
Rx Timing Deviation 3.84Mcps Extended	0		9.2.3.35	Applicable to 3.84Mcps TDD only.	YES	ignore
Multiple PLMN List	0		9.2.1.117		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
E-RNTI	0		9.2.1.94		YES	ignore
Cell Portion LCR ID	0		9.2.3.73	Applicable to 1.28Mcps TDD only.	YES	ignore
Cell Capability Container Extension TDD LCR	0		9.2.3.80	Applicable to 1.28Mcps TDD only.	YES	ignore
Extended S-RNTI	0		9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a	YES	ignore

	value larger than	
	1048575.	

Range bound	Explanation
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in
	parallel.

#### 9.1.24A GERAN UPLINK SIGNALLING TRANSFER INDICATION

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
UC-ID	М		9.2.1.71	UC-ID may be a GERAN cell identifier.	YES	ignore
SAI	М		9.2.1.52		YES	ignore
S-RNTI	М		9.2.1.53	If the Extended S- RNT/ IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
D-RNTI	0		9.2.1.24		YES	ignore
L3 Information	М		9.2.1.32		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0		9.2.1.11		YES	ignore
URA Information	0		9.2.1.70B	URA information may be GRA information.	YES	ignore
Extended S-RNTI	0		9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

# 9.1.25 DOWNLINK SIGNALLING TRANSFER REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
C-ID	М		9.2.1.6	May be a GERAN cell identifier.	YES	ignore
D-RNTI	М		9.2.1.24		YES	ignore
L3 Information	М		9.2.1.32		YES	ignore
D-RNTI Release Indication	М		9.2.1.25		YES	ignore
URA-ID	0		9.2.1.70		YES	ignore
MBMS Bearer Service List		0 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	ignore
>TMGI	М		9.2.1.80		-	
Old URA-ID	0		URA-ID 9.2.1.70		YES	ignore
SRNC-ID	C-URA		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	YES	ignore
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Enhanced PCH Capability	0		9.2.1.132	FDD and 1.28Mcps TDD only.	YES	Ignore

Condition	Explanation
URA	The IE shall be present if the URA-ID IE or Old URA-ID IE is present.

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.

### 9.1.26 RELOCATION COMMIT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
D-RNTI	0		9.2.1.24		YES	ignore
RANAP Relocation Information	0		9.2.1.47		YES	ignore

# 9.1.27 PAGING REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
CHOICE Paging Area	М				YES	ignore
>URA					_	
>>URA-ID	Μ		9.2.1.70	May be a GRA-ID.	_	
>Cell				UTRAN only.	_	
>>C-ID	Μ		9.2.1.6		_	
SRNC-ID	М		RNC-ID 9.2.1.50	May be a BSC-ID. If the <i>Extended</i> <i>SRNC-ID</i> IE is included in the message, the <i>SRNC-ID</i> IE shall be ignored.	YES	ignore
S-RNTI	М		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
IMSI	М		9.2.1.31	5	YES	ignore
DRX Cycle Length Coefficient	М		9.2.1.26		YES	ignore
CN Originated Page to Connected Mode UE		01			YES	ignore
>Paging Cause	М		9.2.1.41E		-	
>CN Domain Type	Μ		9.2.1.11A		-	
>Paging Record Type	Μ		9.2.1.41F		-	
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Enhanced PCH Capability	0		9.2.1.132	FDD and 1.28Mcps TDD only.	YES	Ignore
Extended S-RNTI	0		9.2.1.154	The Extended S- RNT/ IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

# 9.1.28 DEDICATED MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
Measurement ID	Μ		9.2.1.37		YES	reject
CHOICE Dedicated Measurement Object Type	Μ				YES	reject
>RL					-	
>>RL Information		1 <maxn rOfRLs&gt;</maxn 			EACH	reject
>>>RL ID	Μ		9.2.1.49		_	
>>>DPCH ID	0		9.2.3.3	TDD only.	_	
>>>DPCH ID 7.68Mcps	0		9.2.3.34	7.68Mcps TDD only.	_	
>>>HS-SICH Information		0 <maxn rOfHSSI CHs&gt;</maxn 		TDD only.	GLOBAL	reject
>>>HS-SICH ID	Μ		9.2.3.3ad		_	
>RLS				FDD only.	-	
>>RL Set Information		1 <maxn rOfRLSet s&gt;</maxn 			EACH	reject
>>>RL Set ID	Μ		9.2.2.35		_	
>ALL RL			NULL		_	
>ALL RLS			NULL	FDD only.	-	
Dedicated Measurement Type	Μ		9.2.1.18		YES	reject
Measurement Filter Coefficient	0		9.2.1.36		YES	reject
Report Characteristics	Μ		9.2.1.48		YES	reject
CFN reporting indicator	M		FN reporting indicator 9.2.1.28A		YES	reject
CFN	0		9.2.1.9		YES	reject
Partial Reporting Indicator	0		9.2.1.41Fa		YES	ignore
Measurement Recovery Behavior	0		9.2.1.38A		YES	ignore
Alternative Format Reporting Indicator	0		9.2.1.2D		YES	ignore

Range bound	Explanation
maxNrOfRLs	Maximum number of individual RLs a measurement can be started on.
maxNrOfRLSets	Maximum number of individual RL Sets a measurement can be started
	on.

# 9.1.29 DEDICATED MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigne Criticalit
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	10,000
Measurement ID	M		9.2.1.37		YES	ignore
CHOICE Dedicated	0		3.2.1.37	Dedicated	YES	ignore
>RL or ALL RL				Measuremen t Object Type the measuremen t was initiated with. See Note 1.		Ignore
>>RL Information		1 <maxnr< td=""><td></td><td>See Note 1.</td><td>EACH</td><td>ignoro</td></maxnr<>		See Note 1.	EACH	ignoro
>>RL Information		OfRLs>			EACH	ignore
		UIRLS>	0.0.4.40			
>>>RL ID	M		9.2.1.49		_	
>>>DPCH ID	0		9.2.3.3	TDD only.	-	
>>>DPCH ID 7.68Mcps	0		9.2.3.34	7.68Mcps TDD only.	_	
>>>Dedicated	М		9.2.1.19		_	
Measurement Value	1					
>>>CFN	0		9.2.1.9	Dedicated Measuremen t Time Reference.	_	
>>>HS-SICH ID	0		9.2.3.3ad	TDD only	YES	reject
>>>Multiple Dedicated Measurement Value Information		0 <maxnr OfDPCHsP erRL-1&gt;</maxnr 		Applicable to 3.84Mcps TDD only.	GLOBAL	ignore
>>>>DPCH ID	М		9.2.3.3		_	
>>>Dedicated	M		9.2.1.19			
	111		5.2.1.15			
Measurement Value >>>Multiple Dedicated						
Measurement Value		0 <maxnr OfDPCHsL CRPerRL- 1&gt;</maxnr 		Applicable to 1.28Mcps TDD only.	GLOBAL	ignore
>>>>DPCH ID	М		9.2.3.3			
>>>>Dedicated	M	1	9.2.1.19			
			9.2.1.19		—	
Measurement Value						
>>>Multiple HS-SICH Measurement Value Information		0 <maxnr OfHSSICH s -1&gt;</maxnr 		TDD only.	GLOBAL	ignore
>>>HS-SICH ID	М		9.2.3.3ad		_	
>>>>Dedicated	М		9.2.1.19		_	
Measurement Value						
>>>Multiple Dedicated Measurement Value Information 7.68Mcps		0 <maxnr OfDPCHs7 68PerRL- 1&gt;</maxnr 		Applicable to 7.68Mcps TDD only.	GLOBAL	ignore
>>>>DPCH ID 7.68Mcps	М		9.2.3.34		-	
>>>Dedicated	М		9.2.1.19		_	
Measurement Value				EDD only		
				FDD only See Note 2.		
>>RL Set Information		1 <maxnr< td=""><td></td><td>SEE NULE Z.</td><td>EACH</td><td>ignore</td></maxnr<>		SEE NULE Z.	EACH	ignore
		OfRLSets>				
>>>RL Set ID	M		9.2.2.35			

Measurement Value						
>>>CFN	0		9.2.1.9	Dedicated Measuremen t Time Reference.	_	
Criticality Diagnostics	0		9.2.1.13		YES	Ignore
Measurement Recovery Support Indicator	0		9.2.1.38C		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.						

Range bound	Explanation
maxNrOfRLs	Maximum number of individual RLs the measurement can be started on.
maxNrOfRLSets	Maximum number of individual RL Sets the measurement can be started on.
maxNrOfDPCHsPerRL	Maximum number of DPCHs per RL a measurement can be started on for 3.84Mcps TDD.
maxNrOfDPCHsLCRPerRL	Maximum number of DPCHs per RL a measurement can be started on for 1.28Mcps TDD.
maxNrOfHSSICHs	Maximum number of HSSICHs per RL a measurement can be started on.
maxNrOfDPCHs768PerRL	Maximum number of DPCHs per RL a measurement can be started on for 7.68Mcps TDD.

# 9.1.30 DEDICATED MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
Measurement ID	М		9.2.1.37		YES	ignore
Cause	М		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
CHOICE Dedicated Measurement Object Type	0			Dedicated Measuremen t Object Type the measuremen t was initiated with.	YES	ignore
>RL or ALL RL					_	
>>Unsuccessful RL Information		1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>>>RL ID	М		9.2.1.49		-	
>>>Individual Cause	0		Cause 9.2.1.5		-	
>>Successful RL Information		0 <maxnr OfRLs-1&gt;</maxnr 			EACH	ignore
>>>RL ID	М		9.2.1.49		-	
>>>DPCH ID	0		9.2.3.3	TDD only.	-	
>>>Dedicated Measurement Value	М		9.2.1.19		_	
>>>CFN	0		9.2.1.9	Dedicated Measuremen t Time Reference.	_	
>>>HS-SICH ID	0		9.2.3.3ad	TDD only.	YES	reject
>RLS or ALL RLS				FDD only.	-	
>>Unsuccessful RL Set Information		1 <maxnr OfRLSets&gt;</maxnr 			EACH	ignore
>>>RL Set ID	М		9.2.2.35		_	
>>>Individual Cause	0		Cause 9.2.1.5		_	
>>Successful RL Set Information		0 <maxnr OfRLSets- 1&gt;</maxnr 			EACH	ignore
>>>RL Set ID	М		9.2.2.35		-	
>>>Dedicated Measurement Value	М		9.2.1.19		_	
>>>CFN	0		9.2.1.9	Dedicated Measuremen t Time Reference.	-	

Range bound	Explanation
maxNrOfRLs	Maximum number of individual RLs the measurement can be started on.
maxNrOfRLSets	Maximum number of individual RL Sets the measurement can be started
	on.

# 9.1.31 DEDICATED MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
Measurement ID	М		9.2.1.37		YES	ignore
CHOICE Dedicated Measurement Object Type	Μ			Dedicated Measuremen t Object Type the measuremen t was initiated with.	YES	ignore
>RL or ALL RL				See Note 1.	_	
>>RL Information		1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>>>RL ID	М		9.2.1.49		_	
>>>DPCH ID	0		9.2.3.3	TDD only.	_	
>>>DPCH ID 7.68Mcps	0		9.2.3.34	7.68Mcps TDD only.	_	
>>>Dedicated Measurement Value Information	М		9.2.1.19A		-	
>>>HS-SICH ID	0		9.2.3.3ad	TDD only.	YES	ignore
>RLS or ALL RLS				FDD only See Note 2.	_	
>>RL Set Information		1 <maxnr OfRLSets&gt;</maxnr 			EACH	ignore
>>>RL Set ID	М		9.2.2.35		_	
>>>Dedicated Measurement Value Information	Μ		9.2.1.19A		-	
Measurement Recovery Reporting Indicator	0		9.2.1.38B		YES	ignore
Note 1: This is a simplified re the ASN.1, each hav Note 2: This is a simplified re the ASN.1, each hav	ring exactly the presentation of	e same structur of the ASN.1: t	<sup>.</sup> e. here are two di			

Range bound	Explanation
maxNrOfRLs	Maximum number of individual RLs the measurement can be started
	on.
maxNrOfRLSets	Maximum number of individual RL Sets the measurement can be
	started on.

# 9.1.32 DEDICATED MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
Measurement ID	М		9.2.1.37		YES	ignore

# 9.1.33 DEDICATED MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
Measurement ID	Μ		9.2.1.37		YES	ignore
Cause	Μ		9.2.1.5		YES	ignore
CHOICE Dedicated Measurement Object Type	0			Dedicated Measuremen t Object Type the measuremen t was initiated with.	YES	ignore
>RL or ALL RL					-	
>>Unsuccessful RL Information		1 <maxnrof RLs&gt;</maxnrof 			EACH	ignore
>>>RL ID	М		9.2.1.49		-	
>>>Individual Cause	0		Cause 9.2.1.5		-	
>RLS or ALL RLS				FDD only.	_	
>>Unsuccessful RL Set Information		1 <maxnrof RLSets&gt;</maxnrof 			EACH	ignore
>>>RL Set ID	М		9.2.2.35		-	
>>>Individual Cause	0		Cause 9.2.1.5		_	

Range bound	Explanation
maxNrOfRLs	Maximum number of individual RLs the measurement can be started on.
maxNrOfRLSets	Maximum number of individual RL Sets the measurement can be started
	on.

#### 9.1.34 COMMON TRANSPORT CHANNEL RESOURCES RELEASE REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
D-RNTI	М		9.2.1.24		YES	ignore

# 9.1.35 COMMON TRANSPORT CHANNEL RESOURCES REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
D-RNTI	M		9.2.1.24		YES	reject
C-ID	0		9.2.1.6		YES	reject
Transport Bearer Request Indicator	Μ		9.2.1.61	Request a new transport bearer or to use an existing bearer for the user plane.	YES	reject
Transport Bearer ID	М		9.2.1.60	Indicates the lur transport bearer to be used for the user plane.	YES	reject
Permanent NAS UE Identity	0		9.2.1.73		YES	ignore
Binding ID	0		9.2.1.3	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
MBMS Bearer Service List		0 <max NrOfMB MSServ ices&gt;</max 			GLOBAL	notify
>TMGI	М		9.2.1.80		_	
TNL QoS	Ö		9.2.1.56A	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
Enhanced FACH Support Indicator	0		9.2.1.131	FDD and 1.28Mcps TDD only.	YES	Ignore
Common E-DCH Support Indicator	0		9.2.2.92	FDD only.	YES	Ignore
HS-DSCH Physical Layer Category	0		9.2.1.30Oa		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.	YES	ignore

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.

# 9.1.36 COMMON TRANSPORT CHANNEL RESOURCES RESPONSE

#### 9.1.36.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
S-RNTI	Μ		9.2.1.53	If the Extended S- RNT/ IE is included in the message, the S-RNT/ IE shall be ignored.	YES	ignore
C-RNTI	0		9.2.1.14		YES	ignore
FACH Info for UE Selected S-CCPCH		1			YES	ignore
>FACH Flow Control Information	Μ		9.2.1.26C	If the Enhanced FACH Information Response IE is included in the message, the FACH Flow Control Information IE shall be ignored.	YES	ignore
Transport Layer Address	0		9.2.1.62		YES	ignore
Binding ID	0		9.2.1.3		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
C-ID	M		9.2.1.6		YES	ignore
Active MBMS Bearer Service List		0 <maxnr OfActiveMB MSService s&gt;</maxnr 			GLOBAL	ignore
>TMGI	М		9.2.1.80		_	
>Transmission Mode	М		9.2.1.81		-	
Enhanced FACH Information Response		01			YES	ignore
>Common HS-DSCH- RNTI Priority Queue Information for Enhanced FACH	Μ		Priority Queue Information for Enhanced FACH/PC H 9.2.1.133		_	
>Dedicated HS-DSCH- RNTI Priority Queue Information for Enhanced FACH	М		Priority Queue Information for Enhanced FACH/PC H 9.2.1.133		_	
>Priority Queue Information for Enhanced PCH	0		Priority Queue Information for		_	

		F	nhanced ACH/PC 1 .2.1.133			
>HS-DSCH Initial Capacity Allocation	М	9	.2.1.30Na		-	
>HS-DSCH-RNTI	0	9	.2.1.30P		_	
Common E-DCH MAC-d Flow Specific Information	0	9	.2.2.93		-	
E-RNTI	0	9	.2.1.94		YES	ignore
Extended S-RNTI	0	9	.2.1.154	The Extended S- RNT/ IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

Range bound	Explanation				
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.				

# 9.1.36.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
S-RNTI	М		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
C-RNTI	0		9.2.1.14		YES	ignore
FACH Info for UE Selected S-CCPCHs		1			YES	ignore
>FACH Flow Control Information	Μ		9.2.1.26C	If the Enhanced FACH Information Response IE is included in the message, the FACH Flow Control Information IE shall be ignored.	YES	ignore
Transport Layer Address	0		9.2.1.62		YES	ignore
Binding ID	0		9.2.1.3		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
C-ID	М		9.2.1.6		YES	ignore
Active MBMS Bearer Service List		0 <maxnr OfActiveM BMSServic es&gt;</maxnr 			GLOBAL	ignore
>TMGI	М		9.2.1.80		-	
>Transmission Mode	М		9.2.1.81		_	
Enhanced FACH		0 1	0.20		YES	ignore
Information Response		-				-griefe
>Common HS-DSCH- RNTI Priority Queue Information for Enhanced FACH	M		Priority Queue Information for Enhanced FACH/PC H 9.2.1.133		-	
>Dedicated HS-DSCH- RNTI Priority Queue Information for Enhanced FACH	M		Priority Queue Information for Enhanced FACH/PC H 9.2.1.133		_	
>Priority Queue Information for Enhanced PCH	0		Priority Queue Information for Enhanced FACH/PC H		_	

		9.2.1.133			
>HS-DSCH Initial Capacity Allocation	Μ	9.2.1.30Na		-	
>HS-DSCH-RNTI	0	9.2.1.30P		-	
Common E-DCH MAC-d Flow Specific Information LCR	0	9.2.3.58		YES	ignore
Extended S-RNTI	0	9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

Range bound	Explanation
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.

### 9.1.37 COMMON TRANSPORT CHANNEL RESOURCES FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	Μ		9.2.1.59		_	
S-RNTI	Μ		9.2.1.53	If the Extended S- RNT/ IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
Cause	Μ		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
Extended S-RNTI	0		9.2.1.154	The Extended S- RNT/ IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

# 9.1.38 COMPRESSED MODE COMMAND [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
Active Pattern Sequence Information	Μ		9.2.2.A		YES	ignore

# 9.1.39 ERROR INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
Cause	0		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
S-RNTI	0		9.2.1.53	If the Extended S- RNT/ IE is included in the message, the S-RNTI IE shall not be included.	YES	ignore
D-RNTI	0		9.2.1.24		YES	ignore
Extended S-RNTI	0		9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

# 9.1.40 DL POWER TIMESLOT CONTROL REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
DL Time Slot ISCP Info	0		9.2.3.2D	Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, not applicable to 1.28Mcps TDD.	YES	ignore
DL Time Slot ISCP Info LCR	0		9.2.3.2F	Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
Primary CCPCH RSCP	0		9.2.3.5		YES	ignore
Primary CCPCH RSCP Delta	0		9.2.3.5a		YES	ignore

# 9.1.41 RADIO LINK PREEMPTION REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
RL Information		0 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	М		9.2.1.49		_	
>E-DCH MAC-d Flow Specific Information		0 <maxnr OfEDCHM ACdFlows &gt;</maxnr 			EACH	ignore
>>E-DCH MAC-d Flow ID	Μ		9.2.1.91		_	
HS-DSCH MAC-d Flow Specific Information		0 <maxnr OfMACdFI ows&gt;</maxnr 			EACH	ignore
>HS-DSCH MAC-d Flow ID	М		9.2.1.300		-	

Range bound	Explanation
maxNrOfRLs	Maximum number of radio links for one UE.
maxNrOfMACdFlows	Maximum number of HS-DSCH MAC-d flows.
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.1.42 RADIO LINK CONGESTION INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
Congestion Cause	0		9.2.1.79		YES	ignore
RL Information		1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	М		9.2.1.49		_	
>DCH Rate Information		1 <maxnr OfDCHs&gt;</maxnr 			EACH	ignore
>>DCH ID	М		9.2.1.16		_	
>>Allowed Rate Information	0		9.2.1.2A		-	
>E-DCH MAC-d Flow Specific Information		0 <maxnr OfEDCHM ACdFlows</maxnr 			EACH	ignore
>>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>DCH Indicator For E- DCH-HSDPA Operation	0		9.2.2.67		YES	ignore

Range bound	Explanation
maxNrOfRLs	Maximum number of Radio Links for one UE.
maxNrOfDCHs	Maximum number of DCHs for one UE.
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.1.43 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		120	Teject
Measurement ID	M		9.2.1.37		YES	reject
CHOICE Common	M		9.2.1.37		YES	
	IVI				TES	reject
Measurement Object Type >Cell						
>>Reference Cell	M			Maybaa	—	
ldentifier	IVI		UTRAN Cell Identifier 9.2.1.71	May be a GERAN Cell Identifier.	_	
>>Time Slot	0		9.2.1.56	3.84Mcps TDD and 7.68 Mcps TDD only.	-	
>>Time Slot LCR	0		9.2.3.12a	1.28Mcps TDD only	_	
>>Neighbouring Cell Measurement Information		0 <maxnrof MeasNCells &gt;</maxnrof 		UTRAN only.	_	
>>>CHOICE Neighbouring Cell Measurement Information					-	
>>>Neighbourin g FDD Cell Measurement Information				FDD only.	-	
>>>>Neighbo uring FDD Cell Measurement Information	M		9.2.1.41G		-	
>>>>Neighbourin g TDD Cell Measurement Information				3.84Mcps TDD only.	_	
>>>>Neighbo uring TDD Cell Measurement Information	М		9.2.1.41H		-	
>>>Additional Neighbouring Cell Measurement Information					-	
>>>>Neighbo uring TDD Cell Measurement InformationLC R				1.28Mcps TDD only.	-	
>>>>>Neig hbouring TDD Cell Measureme nt Information LCR	М		9.2.1.41Dd		YES	reject
>>>Additional Neighbouring Cell Measurement Information 7.68Mcps					_	
>>>>Neighbo		1		7.68Mcps	_	
uring TDD Cell				TDD only.		

Measurement Information 7.68 Mcps						
>>>>>Neig hbouring TDD Cell Measureme nt Information 7.68 Mcps	М		9.2.3.32		YES	reject
>>UARFCN	0		9.2.1.66	Applicable to 1.28Mcps TDD only.	YES	ignore
>>UpPCH Position LCR	0		9.2.3.56	Applicable to 1.28Mcps TDD only.	YES	ignore
>Additional Common Measurement Object Types				Applicable to 1.28Mcps TDD only.	—	
>>GSM Cell					YES	ignore
>>>CGI	М		9.2.1.5D			
Common Measurement Type	M		9.2.1.12C		YES	reject
Measurement Filter Coefficient	0		9.2.1.36	UTRAN only.	YES	reject
Report Characteristics	M		9.2.1.48		YES	reject
SFN reporting indicator	M		FN reporting indicator 9.2.1.28A		YES	reject
SFN	0		9.2.1.52A	UTRAN only.	YES	reject
Common Measurement Accuracy	0		9.2.1.12A	UTRAN only.	YES	reject
Measurement Recovery Behavior	0		9.2.1.38A	UTRAN only.	YES	ignore
GANSS Time ID	0		9.2.1.119a	This IE may only be present if the <i>Common</i> <i>Measuremen</i> <i>t Type</i> IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning". If the <i>Common</i> <i>Measuremen</i> <i>t Type</i> 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.	YES	ignore
Extension Common Measurement Object Type	0			Applicable to 1.28Mcps	YES	ignore
> ComColl int		1 amounter		TDD only.	VEO	icnore
>GsmCellList		1 <maxnoo< td=""><td></td><td></td><td>YES</td><td>ignore</td></maxnoo<>			YES	ignore

		fGsmCell>			
>>Measurement ID	М		9.2.1.37	—	
>>GSM Cell				—	
>>>CGI	Μ		9.2.1.5D	_	

Range bound	Explanation
maxNrOfMeasNCell	Maximum number of neighbouring cells on which
	measurements can be performed.
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

#### 9.1.44 COMMON MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	Μ		9.2.1.59		_	
Measurement ID	Μ		9.2.1.37		YES	ignore
CHOICE Common Measurement Object Type	0			Common Measuremen t Object Type that the measuremen t was initiated with.	YES	ignore
>Cell					_	
>>Common Measurement value	М		9.2.1.12D		_	
SFN	0		9.2.1.52A	Common Measuremen t Time Reference, UTRAN only.	YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
Common Measurement Achieved Accuracy	0		Common Measurem ent Accuracy 9.2.1.12A	UTRAN only.	YES	ignore
Measurement Recovery Support Indicator	0		9.2.1.38C	UTRAN only.	YES	ignore
Extension Common Measurement Object Type	0			Applicable to 1.28Mcps TDD only.	YES	ignore
>GsmCellList		1 <maxnoo fGsmCell&gt;</maxnoo 			YES	ignore
>>Measurement ID	Μ		9.2.1.37		—	
>>Common Measurement value	0		9.2.1.12D		_	

Range bound	Explanation
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

# 9.1.45 COMMON MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	Μ		9.2.1.59		-	
Measurement ID	М		9.2.1.37		YES	ignore
Cause	М		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
Extension Measurement IdList		0 <maxnoo fGsmCell&gt;</maxnoo 		Applicable to 1.28Mcps TDD only.	YES	ignore
>Measurement ID	Μ		9.2.1.37		_	
>Cause	М		9.2.1.5		_	

Range bound	Explanation
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

#### 9.1.46 COMMON MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
Measurement ID	М		9.2.1.37		YES	ignore
CHOICE Common Measurement Object Type	М			Common Measuremen t Object Type that the measuremen t was initiated with.	YES	ignore
>Cell					_	
>>Common Measurement Value Information	M		9.2.1.12E		-	
SFN	0		9.2.1.52A	Common Measuremen t Time Reference, UTRAN only.	YES	ignore
Measurement Recovery Reporting Indicator	0		9.2.1.38B	UTRAN only.	YES	ignore
Extension Common Measurement Object Type	0			Applicable to 1.28Mcps TDD only.	YES	ignore
>GsmCellList		1 <maxnoo fGsmCell&gt;</maxnoo 			YES	ignore
>>Measurement ID	Μ		9.2.1.37		-	
>>Common Measurement value	0		9.2.1.12D		-	

Range bound	Explanation
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

# 9.1.47 COMMON MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
Measurement ID	М		9.2.1.37		YES	ignore
Extension Measurement IdList		0 <maxnoo fGsmCell&gt;</maxnoo 		Applicable to 1.28Mcps TDD only.	YES	ignore
>Measurement ID	Μ		9.2.1.37		-	

Range bound	Explanation
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

# 9.1.48 COMMON MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		_	
Measurement ID	М		9.2.1.37		YES	ignore
Cause	М		9.2.1.5		YES	ignore
Extension Measurement IdList		0 <maxnoo fGsmCell&gt;</maxnoo 		Applicable to 1.28Mcps TDD only.	YES	ignore
>Measurement ID	М		9.2.1.37		_	
>Cause	М		9.2.1.5		_	

Range bound	Explanation
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

# 9.1.49 INFORMATION EXCHANGE INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
Information Exchange ID	М		9.2.1.31A		YES	reject
CHOICE Information Exchange Object Type	М				YES	reject
>Cell					_	
>>C-ID	M		9.2.1.6	May be a GERAN cell identifier.	-	
>Additional Information Exchange Object Types					_	
>>GSM Cell					_	
>>>CGI	М		9.2.1.5D		-	
>>MBMS Bearer Service					-	
>>>MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	reject
>>>>TMGI	М		9.2.1.80		-	
>>MBMS Bearer Service in MBMS Cell				FDD only.	GLOBAL	reject
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			-	
>>>>C-ID	M		9.2.1.6	Cell identifier of cell in RNC initiating Information Exchange Initiation procedure.	_	
>>>>MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			-	
>>>>TMGI	М		9.2.1.80		_	
>>MBMS Cell				FDD only.	GLOBAL	reject
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			_	
>>>>C-ID	М		9.2.1.6	Cell identifier of cell in receiving RNC not initiating Information Exchange Initiation procedure.	_	
>>ANR Cell					-	
>>>ANR Cell List		1 <maxnr OfANRCell sl&gt;</maxnr 			_	
>>>>C-ID	М	0.5	9.2.1.6		_	
>>Common E-RGCH Cell					GLOBAL	reject
>>>Common E- RGCH Cell List		1< maxNoOfC ommonRG Cells>			_	
>>>>C-ID	М		9.2.1.6		-	
Information Type	М		9.2.1.31E		YES	reject
Information Report Characteristics	М		9.2.1.31C		YES	reject

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.
MaxNrOfCells	Maximum number of cells that can be indicated in the corresponding IE.
maxNrOfANRCells	Maximum number of ANR neighbour cells.
maxNoOfCommonRGCells	Maximum number of Common E-RGCH cells

### 9.1.50 INFORMATION EXCHANGE INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
Information Exchange ID	М		9.2.1.31A		YES	ignore
CHOICE Information Exchange Object Type	0				YES	ignore
>Cell					-	
>>Requested Data Value	М		9.2.1.48A		-	
>Additional Information Exchange Object Types					-	
>>MBMS Bearer Service					-	
>>>MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	ignore
>>>>TMGI	М		9.2.1.80		-	
>>>Requested Data Value	Μ		9.2.1.48A		-	
>>MBMS Bearer Service in MBMS Cell				FDD only.	GLOBAL	ignore
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			-	
>>>>C-ID	M		9.2.1.6	Cell identifier of cell in RNC initiating Information Exchange Initiation procedure.	_	
>>>>MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			-	
>>>>TMGI	М		9.2.1.80		_	
>>>>Requested Data Value	M		9.2.1.48A		-	
>>MBMS Cell				FDD only.	GLOBAL	ignore
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			_	
>>>>C-ID	M		9.2.1.6	Cell identifier of cell in sending RNC not initiating Information Exchange Initiation procedure.	_	
>>>Requested	М	1	9.2.1.48A		_	

Data Value					
>>ANR Cell				_	
>>>ANR Cell List		1 <maxnr OfANRCell s&gt;</maxnr 		-	
>>>>C-ID	М		9.2.1.6	_	
>>>Requested Data Value	М		9.2.1.48A	-	
>>Common E-RGCH Cell				GLOBAL	ignore
>>>Common E- RGCH Cell List		1< maxNoOfC ommonRG Cells>		_	
>>>C-ID	М		9.2.1.6	-	
>>>Requested Data Value	М		9.2.1.48A	_	
Criticality Diagnostics	0		9.2.1.13	YES	ignore

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.
MaxNrOfCells	Maximum number of cells that can be indicated in the corresponding IE.
maxNrOfANRCells	Maximum number of ANR neighbour cells.
maxNoOfCommonRGCells	Maximum number of Common E-RGCH cells.

# 9.1.51 INFORMATION EXCHANGE INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
Information Exchange ID	М		9.2.1.31A		YES	ignore
Cause	М		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

# 9.1.52 INFORMATION REPORT

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		onnounty
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
Information Exchange ID	М		9.2.1.31A		YES	ignore
CHOICE Information Exchange Object Type >Cell	M				YES	ignore
>>Requested Data	M		9.2.1.48B			
Value Information			5.2.1.400			
Exchange Object Types					-	
>>MBMS Bearer Service in MBMS Cell				FDD only.	GLOBAL	ignore
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			-	
>>>>C-ID	M		9.2.1.6	Cell identifier of cell in receiving RNC initiating Information Exchange Initiation procedure.	_	
>>>>MBMS Bearer		1 <maxnr< td=""><td></td><td>procedure:</td><td>_</td><td></td></maxnr<>		procedure:	_	
Service List		OfMBMSS ervices>				
>>>>TMGI	М		9.2.1.80		_	
>>>>Requested Data Value Information	M		9.2.1.48B		_	
>>MBMS Cell				FDD only.	GLOBAL	ignore
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			_	
>>>>C-ID	Μ		9.2.1.6	Cell identifier of cell in sending RNC not initiating Information Exchange Initiation procedure.	_	
>>>>Requested Data Value	М		9.2.1.48B		-	
Information >>Common E-RGCH Cell					GLOBAL	ignore
>>>Common E- RGCH Cell List		1< maxNoOfC ommonRG Cells>			-	
>>>>C-ID	М	1	9.2.1.6		_	
>>>Requested Data Value Information	М		9.2.1.48A		-	

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.
MaxNrOfCells	Maximum number of cells that can be indicated in the corresponding IE.
maxNoOfCommonRGCells	Maximum number of Common E-RGCH cells.

#### 9.1.53 INFORMATION EXCHANGE TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
Information Exchange ID	Μ		9.2.1.31A		YES	ignore

#### 9.1.54 INFORMATION EXCHANGE FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
Information Exchange ID	Μ		9.2.1.31A		YES	ignore
Cause	Μ		9.2.1.5		YES	ignore

### 9.1.55 RESET REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantic s Descripti on	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59			

RNC-ID	M		9.2.1.50	Identity of the sending RNC. If the <i>Extended</i> <i>RNC-ID</i> IE is included in the message, the <i>RNC-</i> <i>ID</i> IE shall be ignored.	YES	reject
CHOICE Reset Indicator	171				160	reject
>Context >Context Information		1 <maxre setContext &gt;</maxre 			– EACH	reject
>>>CHOICE Context Type	М				Ι	
>>>SRNTI					_	
>>>>S-RNTI	M		9.2.1.53	If the Extended S-RNTI IE is included in the message, the S- RNTI IE shall not be included.	_	
>>>DRNTI					_	
>>>>D-RNTI	М		9.2.1.24		-	
>>>>Additional Context Type				See Note 1.		
>>>>Extended S- RNTI	M		9.2.1.154	The <i>Extende</i> <i>S-RNTI</i> IE shall be used if the S- RNTI identity has a value larger than 1048575.	YES	reject
>All Contexts			NULL		_	
>Context Group		1				reiest
>>Context Group Information		1 <maxre setContext Group&gt;</maxre 			EACH	reject

>>>S-RNTI Group	М		9.2.1.53a	If the		
				Extended S-RNTI Group IE is included in the message, the S- RNTI Group IE shall be ignored.		
>>>Extended S-RNTI Group	0		9.2.1.155	The Extended SRNTI Group IE shall be used for S- RNTI identities that have values larger than 1048575.	YES	reject
Extended RNC-ID	0		9.2.1.50a	Identity of the sending RNC. The <i>Extended</i> <i>RNC-ID</i> IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Note 1: This information elen use of a ProtocollE-Single-Co	nent is a simplified ntainer and a Prot	l representation	n of the ASN.1 Container with	. The choice in the ASN.1.	is performed t	hrough the
		-				

Range bound	Explanation
maxResetContext	Maximum number of contexts that can be reset by
	one RESET message.
maxResetContextGroup	Maximum number of context groups that can be reset
	by one RESET message.

# 9.1.56 RESET RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
RNC-ID	Μ		9.2.1.50	Identity of the sending RNC. If the <i>Extended</i> <i>RNC-ID</i> IE is included in the message, the <i>RNC-ID</i> IE shall be ignored.	YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
Extended RNC-ID	0		9.2.1.50a	Identity of the sending RNC. The <i>Extended</i> <i>RNC-ID</i> IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

### 9.1.57 RADIO LINK ACTIVATION COMMAND

#### 9.1.57.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
Delayed activation		1 <maxnrofrl< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnrofrl<>			EACH	ignore
Information		S>				
>RL ID	Μ		9.2.1.49		_	
>Delayed Activation Update	Μ		9.2.1.19Ab		—	

Range bound	Explanation
maxNrOfRLs	Maximum number of Radio Links for one UE.

# 9.1.57.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
Delayed activation Information		1 <maxnrofrl s&gt;</maxnrofrl 			EACH	ignore
>RL ID	М		9.2.1.49		_	
>Delayed Activation Update	М		9.2.1.19Ab		_	

Range bound	Explanation
maxNrOfRLs	Maximum number of Radio Links for one UE.

# 9.1.58 RADIO LINK PARAMETER UPDATE INDICATION

#### 9.1.58.1 FDD Message

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
HS-DSCH FDD Update	0		9.2.2.19c		YES	ignore
Information						Ū.
RL Information		0 <max NrOfRL s&gt;</max 			EACH	ignore
>RL ld	М		9.2.1.49		_	
>Phase Reference Update Indicator	0		9.2.2.27B		_	
E-DCH FDD Update Information	0		9.2.2.19e		YES	ignore
Additional HS Cell Information RL Param Upd		0 <max NrOfHS DSCH- 1&gt;</max 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>HS-DSCH FDD Secondary Serving Update Information	0		9.2.2.19ca		_	
Additional E-DCH Cell Information RL Param Upd		0 <max NrOfED CH-1&gt;</max 		For E-DCH on multiple frequencies in this DRNS. E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	EACH	ignore
>Additional E-DCH FDD Update Information	М		9.2.2.122		—	
CPC Recovery Report	0		ENUMERA TED(Initiat ed,)		YES	ignore
UL CLTD State Update Information	0		9.2.2.134		YES	ignore

Range bound	Explanation
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.
maxNrOfRLs	Maximum number of Radio Links for one UE.

#### 9.1.58.2 TDD Message

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
HS-DSCH TDD Update Information	0		9.2.3.3ac		YES	ignore

# 9.1.59 UE MEASUREMENT INITIATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	Μ		9.2.1.59		-	
Allowed Queuing Time	0		9.2.1.2		YES	reject
Measurement ID	Μ		9.2.1.37		YES	reject
UE Measurement Type	Μ		9.2.3.13Fh		YES	reject
UE Measurement Timeslot information HCR	0		9.2.3.13Fe	3.84 Mcps TDD only.	YES	reject
UE Measurement Timeslot information LCR	0		9.2.3.13Ff	1.28 Mcps TDD only.	YES	reject
UE Measurement Timeslot information 7.68Mcps	0		9.2.3.33	7.68 Mcps TDD only.	YES	reject
Measurement Filter Coefficient	0		9.2.1.36		YES	reject
UE Measurement Report Characteristics	М		9.2.3.13Fc		YES	reject
UE Measurement Parameter Modification Allowed	0		9.2.3.13Fb		YES	reject

# 9.1.60 UE MEASUREMENT INITIATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	Μ		9.2.1.59		-	
Measurement ID	Μ		9.2.1.37		YES	ignore
Measurement Filter Coefficient	0		9.2.1.36		YES	reject
UE Measurement Report Characteristics	0		9.2.3.13Fc		YES	reject
Criticality Diagnostics	0		9.2.1.13		YES	ignore

# 9.1.61 UE MEASUREMENT INITIATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
Measurement ID	М		9.2.1.37		YES	ignore
Cause	М		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

# 9.1.62 UE MEASUREMENT REPORT [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
Measurement ID	Μ		9.2.1.37		YES	ignore
UE Measurement Value Information	М		9.2.3.13Fj		YES	ignore

# 9.1.63 UE MEASUREMENT TERMINATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
Measurement ID	М		9.2.1.37		YES	ignore

# 9.1.64 UE MEASUREMENT FAILURE INDICATION [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
Measurement ID	М		9.2.1.37		YES	ignore
Cause	М		9.2.1.5		YES	ignore

### 9.1.65 IUR INVOKE TRACE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
D-RNTI	0		9.2.1.24		YES	ignore
Trace Reference	Μ		9.2.1.58c		YES	ignore
UE Identity	Μ		9.2.1.66A		YES	ignore
Trace Recording Session Reference	М		9.2.1.58b		YES	ignore
List Of Interfaces To Trace		0maxNrO fInterfaces			EACH	ignore
>Interface	М		ENUMERA TED (lub, lur,)		-	
Trace Depth	Μ		9.2.1.58a		YES	ignore
MDT Configuration	0		9.2.1.139		YES	ignore
Trace Collection Entity IP Address	0		Transport Layer Address 9.2.1.62		YES	ignore

Range bound	Explanation
maxNrOfInterfaces	Maximum of Interfaces to be traced.

# 9.1.66 IUR DEACTIVATE TRACE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
D-RNTI	0		9.2.1.24		YES	ignore
Trace Reference	М		9.2.1.58c		YES	ignore

# 9.1.67 MBMS ATTACH COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	ignore
>TMGI	М		9.2.1.80		-	
CHOICE UE State	0				YES	ignore
>CELL_FACH/CELL_PCH					_	
>>D-RNTI	М		9.2.1.24		_	
>URA_PCH					-	
>>SRNC-ID	M		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	_	
>>URA-ID	М		9.2.1.70		-	
>>Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.

# 9.1.68 MBMS DETACH COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	ignore
>TMGI	М		9.2.1.80		_	
CHOICE UE State	0				YES	ignore
>CELL_FACH/CELL_PCH					_	
>>D-RNTI	М		9.2.1.24		_	
>URA_PCH					_	
>>SRNC-ID	M		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	_	
>>URA-ID	М		9.2.1.70		_	
>>Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.

# 9.1.69 DIRECT INFORMATION TRANSFER

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
RNC-ID	Μ		9.2.1.50	ID of an RNC which initiates the procedure. If the <i>Extended</i> <i>RNC-ID</i> IE is included in the message, the <i>RNC-ID</i> IE shall be ignored.	YES	ignore
Provided Information	М		9.2.1.85		YES	ignore
Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

# 9.1.70 ENHANCED RELOCATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
Cause	М		9.2.1.5		YES	reject
Permanent NAS UE Identity	М		9.2.1.73		YES	reject
SRNC-ID	0		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	YES	reject
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
S-RNTI	Μ		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	reject
RANAP Enhanced Relocation Information Request	М		9.2.1.124		YES	reject
Extended S-RNTI	0		9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	reject

# 9.1.71 ENHANCED RELOCATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	Μ		9.2.1.59		-	
RANAP Enhanced Relocation Information Response	М		9.2.1.125		YES	ignore

# 9.1.72 ENHANCED RELOCATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
Cause	М		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

# 9.1.73 ENHANCED RELOCATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
Cause	М		9.2.1.5		YES	ignore

# 9.1.74 ENHANCED RELOCATION SIGNALLING TRANSFER

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
L3 Information	Μ		9.2.1.32		YES	ignore

# 9.1.75 ENHANCED RELOCATION RELEASE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		_	
Released CN Domain	М		9.2.1.126		YES	ignore

# 9.1.76 MBSFN MCCH INFORMATION (FDD)

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	10,000
MBSFN Cluster Identity	M		9.2.1.128		YES	ignore
MCCH Message List		1 <maxnr OfMCCH Messages &gt;</maxnr 			YES	reject
>L3 Information	М		9.2.1.32	See Note1 below.	-	
CFN	М		9.2.1.9		YES	reject
MCCH Configuration Info		01			YES	ignore
>Secondary CCPCH system information MBMS	М		9.2.1.127		-	
MBSFN Scheduling Transmission Time Interval info List		0< maxNrOf MBMSL3>			YES	ignore
>TMGI	Μ		9.2.1.80		_	
>MBSFN Scheduling Transmission Time Interval	М		9.2.1.129		-	
Note 1: The IE Contains one INFORMATION, MB MBMS COMMON P	MS UNMODIF	FIED SERVIC	ES INFORMA	TION, MBMS GI	ENERAL INFO	RMATION,

Range bound	Explanation
maxNrOfMCCHMessages	Maximum number of MCCH Messages simultaneous sent on MCCH.
maxNrOfMBMSL3	Maximum number of MBMS service in L3 information.

# 9.1.77 SECONDARY UL FREQUENCY REPORT

# 9.1.77.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		-	
Activation Information	М		9.2.2.109		YES	ignore

# 9.1.78 SECONDARY UL FREQUENCY UPDATE INDICATION

# 9.1.78.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
Activation Information	М		9.2.2.109		YES	ignore

# 9.1.79 ENHANCED RELOCATION RESOURCE REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
IMSI	0		9.2.1.31		YES	reject
Source ID	М		9.2.1.142		YES	ignore
Target ID	М		9.2.1.143		YES	reject
MS Classmark 2	М		9.2.1.144		YES	reject
MS Classmark 3	М		9.2.1.145		YES	ignore
Speech Version	М		9.2.1.146		YES	ignore

# 9.1.80 ENHANCED RELOCATION RESOURCE RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
D-RNTI	М		9.2.1.24		YES	ignore
L3 Information	М		9.2.1.32	The IE contains HANDOVER COMMAND message defined in TS 44.018 [67].	YES	ignore
Cell Capacity Class Value	0		9.2.1.5C		YES	ignore
Load Value	0		9.2.1.33A		YES	ignore

# 9.1.81 ENHANCED RELOCATION RESOURCE FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	reject
Transaction ID	Μ		9.2.1.59		-	
Cause	Μ		9.2.1.5		YES	ignore
Cell Capacity Class Value	0		9.2.1.5C		YES	ignore
Load Value	0		9.2.1.33A		YES	ignore

# 9.1.82 ENHANCED RELOCATION RESOURCE RELEASE COMMAND [TDD]

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
Cause	М		9.2.1.5		YES	ignore

# 9.1.83 ENHANCED RELOCATION RESOURCE RELEASE COMPLETE [TDD]

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	

# 9.1.84 INFORMATION TRANSFER CONTROL REQUEST

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	Μ		9.2.1.40		YES	ignore
Transaction ID	Μ		9.2.1.59		-	
CHOICE Control Type	М				YES	ignore
>Suspension					-	
>>Controlled Object Scope	М		9.2.1.147		-	
>Resume					-	
>>Controlled Object Scope	М		9.2.1.147		-	

# 9.2 Information Element Functional Definition and Contents

# 9.2.0 General

Subclause 9.2 presents the RNSAP 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, in which 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

This subclause contains parameters that are common to FDD and TDD.

## 9.2.1.1 Allocation/Retention Priority

This parameter indicates the priority level in the allocation and retention of transport channel resources in DRNS. DRNS may use the Allocation/Retention priority information of the transport channels composing the RL to prioritise requests for RL Setup/addition and reconfiguration. In similar way, DRNS may use the allocation/Retention priority information of the transport channels composing the RL to prioritise which RL shall be set to failure, in case prioritisation is possible. See Annex A.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Priority Level	Μ		INTEGER(0.	This IE indicates the priority of
			.15)	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
Des session Ose shility				Priority".
Pre-emption Capability	Μ		ENUMERAT	
			ED(shall not	
			trigger pre-	
			emption,	
			may trigger	
Dra amption Vulnarability	М		pre-emption) ENUMERAT	
Pre-emption Vulnerability	IVI		-	
			ED(not pre-	
			emptable,	
			pre-	
			emptable)	

# 9.2.1.2 Allowed Queuing Time

This parameter specifies the maximum queuing time that is allowed in the DRNS until the DRNS must start to execute the request.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Allowed Queuing Time			INTEGER(1. .60)	Unit: Seconds.

## 9.2.1.2A Allowed Rate Information

The *Allowed Rate Information* IE indicates the TFI corresponding to the highest allowed bit rate for the uplink and/or the downlink of a DCH. The SRNC is allowed to use any rate being lower than or equal to the rate corresponding to the indicated TFI.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Allowed UL Rate	0		INTEGER(1. .maxNrOfTF s)	"1": TFI 0, "2": TFI 1, "3": TFI 2, 
Allowed DL Rate	0		INTEGER(1. .maxNrOfTF s)	"1": TFI 0, "2": TFI 1, "3": TFI 2, …

#### 9.2.1.2B Altitude and Direction

This IE contains a description of Altitude and Direction.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Direction of Altitude	М		ENUMERAT ED(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 $N \le a < N+1$ , except for $N=2^{15}-1$ for which the range is extended to include all grater values of (a).

#### 9.2.1.2C Antenna Co-location Indicator

The Antenna Co-location Indicator indicates whether the antenna of the serving and neighbouring cells are approximately co-located.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Antenna Co-location			ENUMERAT	
Indicator			ED(co-	
			located,)	

## 9.2.1.2D Alternative Format Reporting Indicator

This IE indicates if DRNS may report a measurement using an alternative format.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Alternative Format Reporting Indicator			ENUMERAT ED (Alternative format is allowed,)	

#### 9.2.1.3 Binding ID

The Binding ID is the identifier of a user data stream.

In case of transport bearer establishment with ALCAP (TS 25.426 [3]TS 25.424 [35]), this IE contains the identifier that is allocated at the DRNS and that is unique for each transport bearer under establishment to/from the DRNS.

If the Transport Layer Address contains an IP address (IETF RFC 2460 [33]), this IE contains the UDP port (IETF RFC 768 [34]) 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 octet 1 and 2. The first octet of the UDP port field shall be included in the first octet of the Binding ID.

## 9.2.1.4 BLER

This Block Error Rate defines the target radio interface Transport Block Error Rate of the transport channel. BLER is used by the DRNS to determine the needed SIR targets, for admission control and power management reasons.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
BLER			INTEGER(- 630)	Step 0.1. (Range –6.30). It is the Log10 of the BLER.

#### 9.2.1.4A Block STTD Indicator

Void.

#### 9.2.1.4B Burst Mode Parameters

The Burst Mode Parameters IE provides all the relevant information in order to able IPDL in the Burst mode.

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
Burst Start	М		INTEGER(0. .15)	See TS 25.214 [10] and TS 25.224 [22].
Burst Length	М		INTEGER(1 025)	See TS 25.214 [10] and TS 25.224 [22].
Burst freq	М		INTEGER(1. .16)	See TS 25.214 [10] and TS 25.224 [22].

## 9.2.1.5 Cause

The purpose of the cause information element is to indicate the reason for a particular event for the whole protocol.

CHOICE Cause Group M >Radio Network Layer >>Radio Network Layer M Cause		ENUMERATED (Unknown C-ID, Cell not Available, Power Level not Supported, UL Scrambling Code Already in Use, DL Radio Resources not Available, UL Radio Resources not Available, Measurement not Supported For The Object, Combining Resources Not Available, Combining not Supported, Reconfiguration not Allowed, Requested Configuration not Supported, Synchronisation Failure, Requested Tx Diversity Mode not Supported, Measurement Temporarily not Available, Unspecified, Invalid CM Settings, Reconfiguration CFN not Elapsed,	Description
>>Radio Network Layer M	М	(Unknown C-ID, Cell not Available, Power Level not Supported, UL Scrambling Code Already in Use, DL Radio Resources not Available, UL Radio Resources not Available, Measurement not Supported For The Object, Combining Resources Not Available, Combining not Supported, Reconfiguration not Allowed, Requested Configuration not Supported, Synchronisation Failure, Requested Tx Diversity Mode not Supported, Measurement Temporarily not Available, Unspecified, Invalid CM Settings, Reconfiguration CFN not Elapsed,	
	М	(Unknown C-ID, Cell not Available, Power Level not Supported, UL Scrambling Code Already in Use, DL Radio Resources not Available, UL Radio Resources not Available, Measurement not Supported For The Object, Combining Resources Not Available, Combining not Supported, Reconfiguration not Allowed, Requested Configuration not Supported, Synchronisation Failure, Requested Tx Diversity Mode not Supported, Measurement Temporarily not Available, Unspecified, Invalid CM Settings, Reconfiguration CFN not Elapsed,	
		Number of DL Codes Not Supported, Dedicated Transport Channel Type not Supported, DL Shared Channel Type not Supported, Common Transport Channel Type not Supported, UL Spreading Factor not Supported, DL Spreading Factor not Supported, DL Spreading Factor not Supported, CM not Supported, Transaction not Supported by Destination Node B, RL Already Activated/Allocated, , Number of UL Codes Not Supported, Cell reserved for operator use, DPC Mode Change not Supported, Information temporarily not available, Information Provision not supported for the object, Power Balancing status not compatible, Delayed Activation not Supported, RL Timing Adjustment Not Supported, RL Timing Adjustment Not Supported, Unknown RNTI, Measurement Repetition Rate not Compatible with Current Measurements, UE not Capable to Implement Measurement, F-DPCH not supported, Continuous Packet Connectivity DTX- DRX operation not supported, E-DCH TTI2ms not supported, Continuous Packet Connectivity DTX- DRX operation not available, Continuous Packet Connectivity DTX- DRX operation not available,	
		Continuous Packet Connectivity UE DTX Cycle not available, MIMO not available, SixteenQAM UL not supported, HS-DSCH MAC-d PDU Size Format not supported, F-DPCH Slot Format operation not	

· · · · · · · · · · · · · · · · · · ·	
	E-DCH MAC-d PDU Size Format not
	available,
	E-DPCCH Power Boosting not
	supported,
	Trelocprep Expiry,
	Relocation Cancelled,
	Traffic Load In The Target Cell Higher
	Than In The Source Cell,
	Time critical Relocation,
	Resource optimisation relocation,
	Relocation desirable for radio reasons
	, Directed Retry,
	Reduce Load in Serving Cell,
	No lu CS UP relocation,
	SixtyfourQAM DL and MIMO
	Combined not available,
	Multi Cell operation not available,
	Multi Cell operation not supported,
	Semi-Persistent scheduling not
	supported,
	Continuous Packet Connectivity DRX
	not supported,
	Continuous Packet Connectivity DRX
	not available,
	Enhanced Relocation not Supported,
	Relocation Not Supported Due To
	PUESBINE Feature,
	Relocation Failure In Target RNC,
	Relocation Target not allowed,
	Requested Ciphering and/or Integrity
	Protection Algorithms not Supported,
	SixtyfourQAM DL and MIMO
	Combined not supported,
	TX diversity for MIMO UE on DL
	Control Channels not available,
	Single Stream MIMO not supported,
	Single Stream MIMO not available,
	Multi Cell operation with MIMO not
	available,
	Multi Cell operation with MIMO not
	supported,
	Multi Cell E-DCH operation not
	available,
	Multi Cell E-DCH operation not
	supported,
	Multi Cell operation with Single Stream
	MIMO not available,
	Multi Cell operation with Single Stream
	MIMO not supported,
	Cell Specific Tx Diversity Handling For
	Multi Cell Operation Not Available.
	Cell Specific Tx Diversity Handling For
	Multi Cell Operation Not Supported,
	Frequency Specific Compressed Mode
	Not Available, Uplink Closed Loop
	Transmit Diversity Operation Not
	Available, Uplink Closed Loop
	Transmit Diversity Operation Not
	Supported, MIMO with four transmit
	antennas not supported, MIMO with
	four transmit antennas not available,
	Dual Stream MIMO with four transmit
	antennas not supported, Dual Stream
	MIMO with four transmit antennas not
	available, Multiflow operation not
	available, Multiflow operation not
	supported, SixtyfourQAM UL not
	available, SixtyfourQAM UL not
	supported, UL MIMO operation not
	available, UL MIMO operation not
	supported, UL MIMO and SixteenQAM
	operation not available, UL MIMO and
	SixteenQAM operation not supported,
	UL MIMO and SixtyfourQAM operation
	not available, UL MIMO and
	SixtyfourQAM operation not

		supported)
>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		
>>Miscellaneous Cause	М	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
Cell not Available	The concerned cell is not available.
Cell reserved for operator use	The concerned cell is reserved for operator use.
Cell Specific Tx Diversity Handling	Cell specific tx diversity handling for multi cell operation not available in
For Multi Cell Operation Not	the concerned cell(s).
Available	
Cell Specific Tx Diversity Handling	The concerned cell(s) do not support the cell specific tx diversity handling
For Multi Cell Operation Not	for multi cell operation.
Supported	
CM not Supported	The concerned cell(s) do not support Compressed Mode.
Combining not Supported	The DRNS does not support the RL combining for the concerned cells.
Combining Resources Not	The value of the received <i>Diversity Control Field</i> IE was set to "Must", but
Available	the DRNS cannot perform the requested combining.
Common Transport Channel Type	The concerned cell(s) do not support the RACH and/or FACH Common
not Supported	Transport Channel Type. CPC resources for DTX-DRX operation not available in the concerned
Continuous Packet Connectivity	cell(s).
DTX-DRX operation not available Continuous Packet Connectivity	HSPA resources for DRX operation not available in the concerned cell(s).
DRX not available	(for 1.28Mcps TDD only).
	The concerned cell(s) do not support the Continuous Packet Connectivity
Continuous Packet Connectivity DRX not supported	DRX operation (for 1.28Mcps TDD only).
Continuous Packet Connectivity	The concerned cell(s) do not support the Continuous Packet Connectivity
DTX-DRX operation not Supported	DTX-DRX operation.
Continuous Packet Connectivity	The concerned cell(s) do not support the Continuous Packet Connectivity
HS-SCCH less operation not	HS-SCCH less operation.
Supported	
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	The concerned cell(s) do not support the Dedicated Transport Channel
not Supported	Type.
Delayed Activation not Supported	The concerned cell(s) do not support delayed activation of RLs.
Directed Retry	The reason for action is Directed Retry.
DL Radio Resources not Available	The DRNS does not have sufficient DL radio resources 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 Type.
Supported	The concerned cents) to not support the Downlink onlined online rype.
DPC Mode Change not Supported	The concerned cells do not support the 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).
E-DCH not supported	The concerned cell(s) do not support E-DCH.
E-DCH TTI2ms not supported	The concerned cell(s) do not support the E-DCH 2ms TTI operation.
E-DPCCH Power Boosting not	The concerned cell(s) do not support the E-DPCCH Power Boosting.
supported	
Enhanced Relocation not	The DRNS does not support the Enhanced Relocation.
Supported	
F-DPCH not supported	The concerned cell(s) do not support the Fractional DPCH.
F-DPCH Slot Format operation not	The concerned cell(s) do not support the F-DPCH Slot Format operation.
supported	
MIMO with four transmit antennas	The concerned cell(s) do not support the MIMO with four transmit
not supported	antennas operation.
MIMO with four transmit antennas	MIMO with four transmit antennas resources not available in the
not available	concerned cell(s).
Dual Stream MIMO with four	The concerned cell(s) do not support the Dual Stream MIMO with four
transmit antennas not supported	transmit antennas operation.
Dual Stream MIMO with four	Dual Stream MIMO with four transmit antennas resources not available in
transmit antennas not available	the concerned cell(s).
Frequency Specific Compressed	Frequency Specific Compressed Mode is not available in the concerned
Mode not available	cell(s).
HS-DSCH MAC-d PDU Size	The concerned cell(s) do not support the selected HS-DSCH MAC-d PDU
Format not supported	Size Format.
Information Provision not supported	The RNS doesn't support provision of the requested information for the
for the object	concerned object types.
Information temporarily not	The RNS can temporarily not provide the requested information.
available	
Invalid CM Settings	The concerned cell(s) consider the requested Compressed Mode settings
	invalid.

The Digits International Control of Digits Types International Control of Digits International Control Digits International Digits Internat	The Object	management on the approximation is the set
Compatible with Current Measurements         compatible with the current measurement schedule in the SRNC, Measurement Temporally not Available           Measurement Temporally not Available         The DRNS can temporarily not provide the requested measurement Available           MIMO not available         MIMO resources not available in the concerned cell(s).           MIMO not available         The concerned cell(s) do not supported the concerned cell(s).           Multi Cell E-DCH operation not supported         The concerned cell(s) do not support Multi cell E-DCH operation.           Multi Cell operation not available         Multi Cell operation not available in the concerned cell(s).           Multi Cell operation not available         Multi Cell operation with MIMO not cell(s).           Multi Cell operation with MIMO not available         The concerned cell(s).           Multi Cell operation with Single Stream MIMO not available         The concerned cell(s).           Multi Cell operation with Single Stream MIMO not available         The concerned cell(s).           Multi Cell operation with Single Stream MIMO not supported         The concerned cell(s).           Multi Cell operation with Single Stream MIMO not supported         The concerned cell(s).           Nulti Cell operation with Single Stream MIMO not supported         The concerned cell(s).           Nulti Cell operation with Single Stream MIMO.         The concerned cell(s).           Nulti Cell operation on support MIMO <t< td=""><td>The Object</td><td>measurement on the concerned object type.</td></t<>	The Object	measurement on the concerned object type.
Measurements         The DRNS can temporarily not provide the requested measurement value.           MMO not supported         The DRNS can temporarily not provide the requested measurement value.           MMO not supported         The concerned cell(s) do not support the MIMO operation.           MMI Cell E-DCH operation not supported         Multi cell E-DCH operation not supported           Multi Cell E-DCH operation not supported         The concerned cell(s) do not support Multi cell E-DCH operation.           Multi Cell operation not supported         The concerned cell(s) do not support Multi cell operation.           Multi Cell operation not supported         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation with Single         Multi Cell operation with Single           Multi Cell operation with Single         Multi Cell operation with Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operation with Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operation with Single           Stream MIMO not supported         The concerned cell(s) do not support the requested number of DL codes.           Number of DL codes not         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the concerned cell(s) do not supported           Reconfiguration not Supported         DL power leve	Measurement Repetition Rate not	
Measurement Temporarily not Available         The DRNS can temporarily not provide the requested measurement Available           MIMO not available         MIMO resources not available in the concerned cell(s).           MIMO not supported         The concerned cell(s) do not support the MIMO operation.           Multi Cell E-DCH operation not supported         The concerned cell(s) do not support Multi cell E-DCH operation.           Multi Cell operation not available         Multi Cell operation with MIMO not supported           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation with MIMO not available         Multi Cell operation with Single Stream MIMO resources not available in the concerned cell(s).           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operationwith Single Stream MIMO not supported           Number of DL Codes not Supported         The concerned cell(s) do not support Multi Cell operationwith Single Stream MIMO.           Number of DL Codes not Supported         The concerned cell(s) do not support the requested number of DL codes.           Number of DL Codes not Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration NUL Cell operation with Single Stream MIMO.         A DL power level as concerned cell(s) do not supported           Powe		compatible with the current measurement schedule in the SRNC.
Available         value.           MIMO not svapported         The concerned call(s), do not support the MIMO operation.           MIM Cell         Cell CoP operation not           available         Multi cell E-DCH operation not           Multi Cell Co-CH operation not support duiti cell E-DCH operation not support duiti cell coperation not supported         Multi cell operation not supported           Multi Cell operation not supported         The concerned cell(s) do not support Multi cell operation.           Multi Cell operation not supported         The concerned cell(s) do not support Multi cell operation.           Multi Cell operation with MIMO not         Multi Cell operation with Single           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operation with MIMO not supported           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operation with Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operation with Single           Nulti Cell operation to supported         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the concerned cell(s) do n		
MIMO not available         MIMO resources not available in the concerned cell(s).           MIMO not supported         The concerned cell(s) do not support the MIMO operation.           Multi Cell E-DCH operation not available         Multi cell E-DCH operation is not available in the concerned cell(s).           Multi Cell operation not supported         The concerned cell(s) do not support Multi cell operation.           Multi Cell operation not available         Multi Cell operation with MIMO not Multi Cell operation with MIMO resources not available in the concerned cell(s).           Multi Cell operation with MIMO not support Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operationwith MIMO.           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO not supported         The concerned cell(s) do not support the requested number of DL codes.           Number of DL Codes not         The concerned cell(s) do not support the requested number of DL codes.           Supported         A DL power level was requested which the concerned cell(s) do not support the requested number of DL codes.           Supported         A DL power level was requested which the concerned cell(s) do not support the requested number of DL codes.		
MIMC not supported         The concerned cell(s) do not support the MIMO operation.           Multi Cell E-DCH operation not available         Multi cell E-DCH operation is not available in the concerned cell(s).           Multi Cell E-DCH operation not supported         The concerned cell(s) do not support Multi cell operation.           Multi Cell operation not available         Multi Cell operation resources not available in the concerned cell(s).           Multi Cell operation in ot supported         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation in ot supported         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation with MIMO not supported         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operation.           Stream MIMO not available         The concerned cell(s) do not support Multi Cell operation.           No to LS UP relocation         The relocation is triggered by CS call and the source RNC has no LCS           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes. <td></td> <td>value.</td>		value.
Multi cell E-DCH operation not available Multi cell E-DCH operation not supported Multi cell peration not supported Multi cell operation with MIMO not supported Multi Cell operation with Single Stream MIMO not supported Stream MIMO not supported Stream MIMO not supported Nulti Cell operation with Single Stream MIMO not supported The concerned cell(s) do not support Multi Cell operationwith Single Stream MIMO not supported Nulti Cell operation with Single Stream MIMO not supported Nulti Cell operation with Single Stream MIMO not supported No lu CS UP relocation The relocation is triggered by CS call and the source RNC has no lu CS supported Number of DL Codes not Supported Power Balancing status not Comparison Reconfiguration CFN not Elaped The requested action cannot be performed due to that a COMMIT message was requested which the concerned cell(s) do not support. Reconfiguration CFN not Elaped The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned Cell(s) no not support. Reconfiguration not Allowed The SRNC does currently not allow the requested reconfiguration. Reducation Desirable For Radio Reasons Relocation NS supported Due To The DRNS can not support the requested reconfiguration. Reducation Supported Relocation not Supported The concerned cell(s) do not support the requested reconfiguration. Relocation NS supported Due To The DRNS does not support the requested configuration. Relocation NS supported Relocation Target not allowed Relocation failure In Target RNC Requested Configuration not Supported Resource Optimisation Relocation The reason for requesting relocation is resource optimisation. Requested Configuration not Supported Re	MIMO not available	MIMO resources not available in the concerned cell(s).
Multi cell E-DCH operation not available Multi cell E-DCH operation not supported Multi cell peration not supported Multi cell operation with MIMO not supported Multi Cell operation with Single Stream MIMO not supported Stream MIMO not supported Stream MIMO not supported Nulti Cell operation with Single Stream MIMO not supported The concerned cell(s) do not support Multi Cell operationwith Single Stream MIMO not supported Nulti Cell operation with Single Stream MIMO not supported Nulti Cell operation with Single Stream MIMO not supported No lu CS UP relocation The relocation is triggered by CS call and the source RNC has no lu CS supported Number of DL Codes not Supported Power Balancing status not Comparison Reconfiguration CFN not Elaped The requested action cannot be performed due to that a COMMIT message was requested which the concerned cell(s) do not support. Reconfiguration CFN not Elaped The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned Cell(s) no not support. Reconfiguration not Allowed The SRNC does currently not allow the requested reconfiguration. Reducation Desirable For Radio Reasons Relocation NS supported Due To The DRNS can not support the requested reconfiguration. Reducation Supported Relocation not Supported The concerned cell(s) do not support the requested reconfiguration. Relocation NS supported Due To The DRNS does not support the requested configuration. Relocation NS supported Relocation Target not allowed Relocation failure In Target RNC Requested Configuration not Supported Resource Optimisation Relocation The reason for requesting relocation is resource optimisation. Requested Configuration not Supported Re	MIMO not supported	The concerned cell(s) do not support the MIMO operation.
available         Multi Cell E-DCH operation not supported           Multi Cell operation not supported         Multi Cell operation not supported           Multi Cell operation not supported         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation not supported         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation with MIMO not supported         The concerned cell(s) do not support Multi Cell operation with MIMO.           Multi Cell operation with Single         The concerned cell(s).           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO ot supported         The concerned cell(s) do not support full cell operationwith Single           Stream MIMO ot supported         The concerned cell(s) do not support full cell operationwith Single           Stream MIMO ot Supported         The concerned cell(s) do not support full evel was neguested number of UL codes.           Supported         The concerned cell(s) do not support full evel was neguested number of UL codes.           Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfigura		
Multi Cell E-DCH operation not supported         The concerned cell(s) do not support Multi cell E-DCH operation.           Multi Cell operation not available         Multi Cell operation resources not available in the concerned cell(s).           Multi Cell operation with MIMO not available         Multi Cell operation with MIMO resources not available in the concerned cell(s).           Multi Cell operation with MIMO not available         The concerned cell(s) do not support Multi Cell operationwith MIMO.           Multi Cell operation with Single         Multi Cell operation with Single Stream MIMO not available           Multi Cell operation with Single         Multi Cell operation with Single           Stream MIMO not available         Multi Cell operation with Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO not supported         The concerned cell(s) do not support the requested number of UL codes.           Number of UL Codes not         The concerned cell(s) do not support the requested number of UL codes.           Supported         The power balancing status in the SRNC is not compatible with that of the DRNC.           Power Level not Supported         A DL power level was requested which the concerned Cell(s) do not supported.           Reconfiguration CFN not Elapsed         The FSRNC does currently not allow the requ		
supported         Initi Cell operation not supported         Initi Cell operation not supported           Multi Cell operation not supported         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation with MIMO not supported         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation with MIMO not supported         The concerned cell(s)         The concerned cell(s).           Multi Cell operation with Single         The concerned cell(s).         The concerned cell(s).           Multi Cell operation with Single         The concerned cell(s).         The concerned cell(s).           Multi Cell operation with Single         The concerned cell(s).         The concerned cell(s).           No lu CS UP relocation         The relocation is triggered by CS call and the source RNC has no lu CS user plane.           Number of DL Codes not         The concerned cell(s) do not support the requested number of DL codes.           Supported         Power balancing status not         The power balancing status in the SRNC is not compatible with that of the concerned Cell(s) do not support.           Reconfiguration not Allowed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned Cell(s) do not support.           Relocation Not Supported         The requested action cannot be performed due to the ta a COMMIT message was received previously, but the concerned cell(s) do not support.           Reloca		The concerned cell(s) do not support Multi cell E-DCH operation
Multi Cell operation not available         Multi Cell operation resources not available in the concerned cell(s).           Multi Cell operation not available         Multi Cell operation not available           Multi Cell operation with MIMO not available         Multi Cell operation with MIMO not cell(s).           Multi Cell operation with MIMO not available         Multi Cell operation with Single           Multi Cell operation with Single         Multi Cell operation with Single           Stream MIMO not available         Multi Cell operation with Single           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO not available         Multi Cell operation with Single           Stream MIMO not available         The concerned cell(s) do not support the requested number of DL codes.           Number of UL Codes not         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Reconfiguration not Allowed         The sease was requested which the concerned cell(s) do not support.		
Multi Cell operation not supported         The concerned cell(s) do not support Multi Cell operation.           Multi Cell operation with MIMO not         The concerned cell(s).           Multi Cell operation with MIMO not         The concerned cell(s) do not support Multi Cell operationwith MIMO.           Supported         Multi Cell operation with Single         The concerned cell(s).           Multi Cell operation with Single         Multi Cell operation with Single         The concerned cell(s).           Multi Cell operation with Single         The concerned cell(s).         The concerned cell(s).           No lu CS UP relocation         The relocation is triggered by CS call and the source RNC has no lu CS user plane.           Number of DL Codes not         The concerned cell(s) do not support the requested number of UL codes.           Supported         The power lavel was requested which the concerned cell(s) do not support.           Power Balancing status not         The power lavel was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The SRNC does currenty not allow the requested configuration.           Redication Beirable For Radio         The reason for requesting relocation cancellation.           Relocation Not Supported ND         The DRNS does not suppo		Multi Cell operation resources not available in the concerned cell(s)
Multi Cell operation with MIMO not available         Multi Cell operation with MIMO not available         Multi Cell operation with MIMO not support Multi Cell operation with MIMO.           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operation with Single           Stream MIMO not available         The concerned cell(s) do not support Multi Cell operation with Single           Stream MIMO not available         The concerned cell(s) do not support Multi Cell operation with Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operation with Single           Stream MIMO not supported         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The power balancing status in the SRNC is not compatible with that of the compatible           Power Level nol Supported         A DL power level was requested which the concerned CEN) do not support.           Reconfiguration not Allowed         The requested action cannot be performed due to that a COMMIT mesage was received previously, but the concerned CEN has not yet elapsed.           Relocation Cancelled         The reason for requesting relocation is relocation.           Relocation Failure In Target RNC         Relocation is relocation is relocation is relocation.      <		
available         cell(s).           Multi Cell operation with MIMO not supported         The concerned cell(s) do not support Multi Cell operation with MIMO.           Multi Cell operation with Single         Multi Cell operation with Single Stream MIMO resources not available in the concerned cell(s).           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operation with Single Stream MIMO.           No LCS UP relocation         The relocation is triggered by CS call and the source RNC has no lu CS user plane.           Number of DL Codes not         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Power Balancing status not         The power balancing status in the SRNC is not compatible with that of the DRNC.           Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Failure In Target RNC         Relocation the indicated target cell is not allowed for the UE in question.           Relocation Fail		
Multi Cell operation with MIMO not supported         The concerned cell(s) do not support Multi Cell operationwith MIMO.           Supported         Multi Cell operation with Single         Multi Cell operation with Single           Stream MIMO not available         Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO not supported         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the requested number of DL codes.           Number of UL Codes not         The concerned cell(s) do not support the requested number of UL codes.           Supported         The power balancing status in the SRNC is not compatible with that of the compatible           Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Reduce Load in Serving Cell         Load on serving rell needs to be reduced.           Relocation Desirable For Radio Reasons         The PRNC does not support the requested configuration.           Relocation NS Supported         The PRNS does not support the requested configuration.           Relocation NS Supported         The concerned cell(s) do not support the re		
supported         Multi Cell operation with Single           Mutit Cell operation with Single         The concerned cell(s).           Mutit Cell operation with Single         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operationwith Single           No lu CS UP relocation         The relocation is triggered by CS call and the source RNC has no lu CS user plane.           Number of DL Codes not         Supported           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Power Balancing status not         The power balancing status in the SRNC is not compatible with that of the DRNC.           Power Level not Supported         A D L power level was requested which the concerned cell(s) do not support.           Reconfiguration not Allowed         The sRNC does currently not allow the requested reconfiguration.           Relocation Cancelled         The reason for requesting relocation cancellation.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Target not allowed         The concerned cell(s) do not support the requested configuration i.e.           Supported         The reason for requesting relocation and lalowed for the UE in question.		
Multi Cell operation with Single         Multi Cell operation with Single           Stream MIMO not available         the concerned cell(s).           Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operationwith Single           Stream MIMO not supported         The concerned cell(s) do not support Multi Cell operationwith Single           No lu CS UP relocation         The relocation is triggered by CS call and the source RNC has no lu CS           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Power Balancing status not         The power balancing status in the SRNC is not compatible with that of the compatible           DRNC.         Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support the requested reconfiguration not FI not Elapsed.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Reduce Load in Serving Cell         Load on serving cell needs to be reduced.           Relocation Cancelled         The reason for requesting relocation is radio related.           Relocation Target not allowed         Relocation failed due to a failure in target RNC.           Relocation Target not allowed         Relocation to the indicated target cell is not allowed for the UE in question.		The concerned cell(s) do not support Multi Cell operationwith MIMO.
Stream MIMO not available         the concerned cell(s).           Multi Cell operation with Single         Stream MIMO.           Stream MIMO.         The concerned cell(s) do not support Multi Cell operationwith Single           No tu CS UP relocation         The relocation is triggered by CS call and the source RNC has no lu CS user plane.           Number of DL Codes not         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Power Balancing status not         The power balancing status in the SRNC is not compatible with that of the compatible           Power Level not Supported         A D power level was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The reason for the action is relocation cancellation.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Failure In Target RNC         Relocation to the indicated target cell is not allowed for the UE in question.           Relocation Failure In Target RNC         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Configuration not         The concerned cell(s) do not support the requested configura		
Multi Cell operation with Single         The concerned cell(s) do not support Multi Cell operationwith Single Stream MIMO.           No Iu CS UP relocation         The relocation is triggered by CS call and the source RNC has no Iu CS user plane.           Number of DL Codes not         The concerned cell(s) do not support the requested number of DL codes.           Supported         The power control cell(s) do not support the requested number of UL codes.           Supported         The power balancing status in the SRNC is not compatible with that of the concerned cell(s) do not support the requested number of UL codes.           Power Balancing status not         The power balancing status in the SRNC is not compatible with that of the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Redcocladin Gancelled         The reason for the action is relocation cancellation.           Relocation Cancelled         The reason for requesting relocation cancellation.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Requested Ciphering And/Or         The DRNS cas not support the requested configuration i.e.		
Stream MIMO         Stream MIMO.           No lu CS UP relocation         The relocation is triggered by CS call and the source RNC has no lu CS user plane.           Number of DL Codes not         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Power Balancing status not         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.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The reaces of the action is relocation cancellation.           Relocation Failure In Target RNC         The requested action cancellation.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Failure In Target RNC         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested RL ID for this ue Contexit <t< td=""><td></td><td></td></t<>		
No Iu CS UP relocation         The relocation is triggered by CS call and the source RNC has no Iu CS user plane.           Number of DL Codes not         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The power balancing status in the SRNC is not compatible with that of the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The reason for the action is relocation cancellation.           Reduce Load in Serving Cell         Load on serving cell needs to be reduced.           Relocation Cancelled         The reason for requesting relocation failer on tafilure in target RNC.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Target not allowed         Relocation to the indicated target cell is not allowed for the UE in question algorithms.           Supported         The concerned cell(s) do not support the requested configuration i.e. gouper tell           Relocation Target not allowed on the porter cell so not support the requested configuration.         The concerned cell(s) do not support the requested configuration. <tr< td=""><td></td><td>The concerned cell(s) do not support Multi Cell operationwith Single</td></tr<>		The concerned cell(s) do not support Multi Cell operationwith Single
No Iu CS UP relocation         The relocation is triggered by CS call and the source RNC has no Iu CS user plane.           Number of DL Codes not         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Supported         The power balancing status in the SRNC is not compatible with that of the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The reason for the action is relocation cancellation.           Reduce Load in Serving Cell         Load on serving cell needs to be reduced.           Relocation Cancelled         The reason for requesting relocation failer on tafilure in target RNC.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Target not allowed         Relocation to the indicated target cell is not allowed for the UE in question algorithms.           Supported         The concerned cell(s) do not support the requested configuration i.e. gouper tell           Relocation Target not allowed on the porter cell so not support the requested configuration.         The concerned cell(s) do not support the requested configuration. <tr< td=""><td>Stream MIMO not supported</td><td></td></tr<>	Stream MIMO not supported	
user plane.           Number of DL Codes not Supported         The concerned cell(s) do not support the requested number of UL codes.           Number of UL Codes not Supported         The concerned cell(s) do not support the requested number of UL codes.           Power Balancing status not compatible         The power balancing status in the SRNC is not compatible with that of the DRNC.           Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Relocation Cancelled         The reason for the action is relocation cancellation.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Not Supported Due To PUESBINE Feature         The DRNS cas not support the requested ciphering and/or integrity protection algorithms Not Supported           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested RL ID for this uee Context.           Recouring Adjustment not Supported         The concer	No Iu CS UP relocation	The relocation is triggered by CS call and the source RNC has no lu CS
Number of DL Codes not Supported         The concerned cell(s) do not support the requested number of DL codes.           Supported         The concerned cell(s) do not support the requested number of UL codes.           Power Balancing status not compatible         The power balancing status in the SRNC is not compatible with that of the DRNC.           Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reduce Load in Serving Cell         Load on serving cell needs to be reduced.           Relocation Cancelled         The reason for requesting relocation is radio related.           Reasons         Relocation failure In Target RNC           Relocation Not Supported Due To PUESBINE Feature         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, cannot support the requested transmit diversity mode.           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested RL ID for this UE Context.           R		
Supported         Image: Supported           Number of UL Codes not Supported         The concerned cell(s) do not support the requested number of UL codes.           Power Balancing status not compatible         The power balancing status in the SRNC is not compatible with that of the DRNC.           Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The reason for the action is relocation cancellation.           Relocation Desirable For Radio Reasons         The reason for requesting relocation is radio related.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation To supported Due To PUESBINE Feature         The DRNS can not support the relocation due to the PUESBINE Feature.           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested RL ID for this UE Contrext.           Relacation Algorithms Not Supported         The concerned cell(s) do not support the requested RL ID for this UE Contrext.           Requested Tx Diversity mode not Supported <td>Number of DL Codes not</td> <td></td>	Number of DL Codes not	
Number of UL Codes not Supported         The concerned cell(s) do not support the requested number of UL codes.           Power Balancing status not compatible         The power balancing status in the SRNC is not compatible with that of the DRNC.           Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The stance of the action is relocation cancellation.           Reduce Load in Serving Cell         Load on serving cell needs to be reduced.           Relocation Cancelled         The reason for the action is relocation cancellation.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Not Supported Due To PUESBINE Feature         The DRNS can not support the relocation due to the PUESBINE Feature.           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested RL ID for this UE Context.           RL Arready Activated/ Allocated         The concerned cell(s) do not support adjustments of the RL timing.           Supported         The concere		
Supported         Number           Power Balancing status not compatible         The power balancing status in the SRNC is not compatible with that of the DRNC.           Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Relocation Cancelled         The reason for the action is relocation cancellation.           Relocation Failure In Target RNC         Relocation failure in target RNC.           Relocation Not Supported Due To PUESBINE Feature         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested RL ID for this UE Context.           RL Already Activated/ Allocated         The concerned cell(s) do not support the requested RL ID for this UE context.           RL Timing Adjustment not Supported         The concerned cell(s) do not support the Semi-Persistent scheduling operation (or 1.28Mcps TDD only).           SixteyOAMUL and MIMO Combined not suppor		The concerned cell(s) do not support the requested number of LIL codes
Power Balancing status not compatible         The power balancing status in the SRNC is not compatible with that of the DRNC.           Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Reduce Load in Serving Cell         Load on serving cell needs to be reduced.           Relocation Desirable For Radio         The reason for the action is relocation cancellation.           Relocation Tailure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Taiget not allowed         The DRNS can not support the relocation due to the PUESBINE Feature.           PUESBINE Feature         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested RL ID for this UE Context.           RL Aiready Activated/ Allocated         The concerned cell(s) do not support the requested RL ID for this UE Context.           RL Aiready Activated/ Allocated<		
compatible         DRNC.           Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Relocation Cancelled         The reason for the action is relocation cancellation.           Relocation Desirable For Radio Reasons         The reason for the action is relocation cancellation.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Not Supported Due To PUESBINE Feature         The DRNS can not support the relocation due to the PUESBINE Feature.           Requested Ciphering And/Or Supported         The Concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters           Requested Configuration not Supported         The concerned cell(s) do not support the requested transmit diversity mode.           Resource Optimisation Relocation         The concerned cell(s) do not support the requested RL ID for this UE Context.           RL Timing Adjustment not Supported         The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).           SixteenQAM UL not Supported         The concerned cell(s) do not support the Semi-Persisten		The power balancing status in the SPNC is not compatible with that of the
Power Level not Supported         A DL power level was requested which the concerned cell(s) do not support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Reduce Load in Serving Cell         Load on serving cell needs to be reduced.           Relocation Desirable For Radio         The reason for the action is relocation cancellation.           Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Not Supported Due To PUESBINE Feature         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Cinfiguration not Supported         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Configuration not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,           Resource Optimisation Relocation Supported         The concerned cell(s) do not support the requested RL ID for this UE Context.           RL Aiready Activated/ Allocated         The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).           SixterOQAM UL not Supported         The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).		· · · · · · · · · · · · · · · · · · ·
support.           Reconfiguration CFN not Elapsed         The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Reduce Load in Serving Cell         Load on serving cell needs to be reduced.           Relocation Cancelled         The reason for the action is relocation cancellation.           Relocation Desirable For Radio Relocation Not Supported Due To PUESBINE Feature         Relocation failed due to a failure in target RNC.           Relocation Target not allowed         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,           Resource Optimisation Relocation         The concerned cell(s) do not support the requested RL ID for this UE Context.           RL Timing Adjustment not Supported         The concerned cell(s) do not support the RL timing.           Resurce Optimisation Relocation         The concerned cell(s) do not support the RL timing.           Resurce Optimisation Relocation         The concerned cell(s) do not support the RL timing. <t< td=""><td></td><td></td></t<>		
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message was received previously, but the concerned CFN has not yet elapsed.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Reduce Load in Serving Cell         Load on serving cell needs to be reduced.           Relocation Cancelled         The reason for the action is relocation cancellation.           Relocation Desirable For Radio Reasons         The reason for requesting relocation is radio related.           Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         The DRNS does not support the requested ciphering and/or integrity protection algorithms.           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,           Relocation Relocation         The reason for requesting relocation is resource optimisation.           RL Already Activated/ Allocated         The reason for requesting relocation is resource optimisation.           RL Timing Adjustment not Supported         The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).           SixteenQAM UL not Supported         The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).           SixtyfourQAM DL and MIMO Combined not availa		
elapsed.           Reconfiguration not Allowed         The SRNC does currently not allow the requested reconfiguration.           Reduce Load in Serving Cell         Load on serving cell needs to be reduced.           Relocation Desirable For Radio         The reason for the action is relocation cancellation.           Relocation Desirable For Radio         The reason for requesting relocation is radio related.           Relocation Desirable For Radio         Relocation failed due to a failure in target RNC.           Relocation Not Supported Due To PUESBINE Feature         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,           Resource Optimisation Relocation         The concerned cell(s) do not support the requested Transmit diversity mode not supported           RL Timing Adjustment not Supported         The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).           SixtyfourQAM DL and MIMO Combined not available         The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).           SixtyfourQAM DL and MIMO Combined not available         The DRNS does not support SixtyfourQAM DL and	Reconfiguration CFN not Elapsed	
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Reasons         Relocation Failure In Target RNC         Relocation failed due to a failure in target RNC.           Relocation Not Supported Due To PUESBINE Feature         The DRNS can not support the relocation due to the PUESBINE Feature.           Relocation Target not allowed         Relocation to the indicated target cell is not allowed for the UE in question.         Relocation to the indicated target cell is not allowed for the UE in question.           Requested Ciphering And/Or Integrity Protection Algorithms Not Supported         The DRNS does not support the requested ciphering and/or integrity protection algorithms.           Requested Configuration not Supported         The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,           Requested Tx Diversity mode not Supported         The concerned cell(s) do not support the requested transmit diversity mode.           Resource Optimisation Relocation         The reason for requesting relocation is resource optimisation.           RL Already Activated/ Allocated         The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).           Semi-Persistent scheduling not supported         The concerned cell(s) do not support the 16 QAM UL.           SixtyfourQAM DL and MIMO Combined not available         SixtyfourQAM DL and MIMO Combined not available           SixtyfourQAM DL and MIMO Combined not supported         The Concerned cells.           Synchronisation Failure         Loss of UL Uu synchroni	Relocation Desirable For Radio	The reason for requesting relocation is radio related.
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Combined not availablecell(s).SixtyfourQAM DL and MIMOThe DRNS does not support SixtyfourQAM DL and MIMO Combined for the concerned cells.Synchronisation FailureLoss of UL Uu synchronisation.Time Critical RelocationRelocation is requested for time critical reason i.e. this cause value is	supported	
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Combined not supportedthe concerned cells.Synchronisation FailureLoss of UL Uu synchronisation.Time Critical RelocationRelocation is requested for time critical reason i.e. this cause value is	supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO	The concerned cell(s) do not support the 16 QAM UL. SixtyfourQAM DL and MIMO Combined not available in the concerned
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Time Critical Relocation Relocation is requested for time critical reason i.e. this cause value is	supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO Combined not available SixtyfourQAM DL and MIMO	The concerned cell(s) do not support the 16 QAM UL. SixtyfourQAM DL and MIMO Combined not available in the concerned cell(s). The DRNS does not support SixtyfourQAM DL and MIMO Combined for
Time Critical Relocation Relocation is requested for time critical reason i.e. this cause value is	supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO Combined not available SixtyfourQAM DL and MIMO	The concerned cell(s) do not support the 16 QAM UL. SixtyfourQAM DL and MIMO Combined not available in the concerned cell(s). The DRNS does not support SixtyfourQAM DL and MIMO Combined for the concerned cells.
	supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO Combined not available SixtyfourQAM DL and MIMO Combined not supported	The concerned cell(s) do not support the 16 QAM UL. SixtyfourQAM DL and MIMO Combined not available in the concerned cell(s). The DRNS does not support SixtyfourQAM DL and MIMO Combined for the concerned cells.
	supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO Combined not available SixtyfourQAM DL and MIMO Combined not supported Synchronisation Failure	The concerned cell(s) do not support the 16 QAM UL. SixtyfourQAM DL and MIMO Combined not available in the concerned cell(s). The DRNS does not support SixtyfourQAM DL and MIMO Combined for the concerned cells. Loss of UL Uu synchronisation.

dropped if relocation is not performed.
Relocation to reduce load in the source cell is rejected, as the target cell's
traffic load is higher than that in the source cell.
The requested action cannot be performed due to lack of support of the
corresponding action in the destination Node B.
Relocation Preparation procedure is cancelled when timer TRELOCprep
expires.
The concerned cell(s) do not support the Single Stream MIMO.
Single Stream MIMO resources not available in the concerned cell(s).
The DRNS does not have sufficient radio resources available to support
transmit diversity on downlink control channels when the UE is configured
in MIMO mode with P-CPICH & S-CPICH as phase references (TS
25.211 [8]).
The UE is not capable to initiate/report a requested measurement due to
its current state or capabilities.
The DRNS does not have sufficient UL radio resources available.
The concerned UL scrambling code is already in use for another UE.
The concerned cell(s) do not support the requested minimum UL SF.
The concerned cell(s) do not support the Uplink Shared Channel Type.
The DRNS is not aware of a cell with the provided C-ID.
The SRNC or DRNC is not aware of a UE indicated with the provided
RNTI.
Sent when none of the above cause values applies but still the cause is
Radio Network Layer related.
Uplink Closed Loop Transmit Diversity Operation resources not available
in the concerned cell(s).
The concerned cell(s) do not support UL CLTD Operation.
Multiflow resources not available in the concerned cell(s).
The concerned cell(s) do not support Multiflow operation.
SixtyfourQAM UL resources are not available in the concerned cell(s).
•
The concerned cell(s) do not support SixtyfourQAM UL operation.
UL MIMO resources are not available in the concerned cell(s).
The concerned cell(s) do not support UL MIMO operation.
UL MIMO and SixteenQAM resources are not available in the concerned
cell(s).
The concerned cell(s) do not support UL MIMO and SixteenQAM
operation.
UL MIMO and SixtyfourQAM resources are not available in the concerned
cell(s).
The concerned cell(s) do not support UL MIMO and SixtyfourQAM

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 or IE groups in wrong order or with
constructed message)	too many 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	DRNS control processing overload.
Hardware Failure	DRNS hardware failure.
Not enough User Plane Processing Resources	DRNS has insufficient user plane processing resources available.
O&M Intervention	Operation and Maintenance intervention related to DRNS 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.

# 9.2.1.5A Cell Geographical Area Identity (Cell GAI)

The Cell Geographical Area is used to identify the geographical area of a cell. The area is represented as a polygon. See TS 23.032 [25].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell GAI Geographical Co-ordinates		1 <maxnrofpoints></maxnrofpoints>		
>Latitude Sign	М		ENUMERAT ED(North, South)	
>Degrees of Latitude	М		INTEGER( 02 <sup>23</sup> -1)	The IE value (N) is derived by this formula: $N \le 2^{23} X /90 < N+1$ X being the latitude in degree (0° 90°).
>Degrees of Longitude	М		INTEGER( -2 <sup>23</sup> 2 <sup>23</sup> -1)	The IE value (N) is derived by this formula: $N \le 2^{2^4} X / 360 < N+1$ X being the longitude in degree (-180°+180°).

Range bound	Explanation
maxNrOfPoints	Maximum no. of points in polygon.

# 9.2.1.5B Cell Geographical Area Additional Shapes (Cell GAI Additional Shapes)

This IE is used to provide several descriptions of the geographical area of a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Cell GAI				
Additional Shapes				
>GA Point With				
Uncertainty				
>>GA Point With	M		9.2.1.30A	Ellipsoid point with
Uncertainty				uncertainty circle.
>GA Ellipsoid point				
with uncertainty Ellipse				
>>GA Ellipsoid	M		9.2.1.30B	Ellipsoid point with
point with uncertainty				uncertainty Ellipse.
Ellipse				
>GA Ellipsoid point				
with altitude				
>>GA Ellipsoid	M		9.2.1.30C	Ellipsoid point with altitude.
point with altitude				
>GA Ellipsoid point				
with altitude and				
uncertainty Ellipsoid				
>>GA Ellipsoid	M		9.2.1.30D	Ellipsoid point with altitude
point with altitude				and uncertainty Ellipsoid.
and uncertainty				
Ellipsoid				
>GA Ellipsoid Arc				
>>GA Ellipsoid Arc	М		9.2.1.30E	Ellipsoid Arc.

## 9.2.1.5C Cell Capacity Class Value

The *Cell Capacity Class Value* IE contains the capacity class for both the uplink and downlink. *Cell Capacity Class Value* IE is the value that classifies the cell capacity with regards to the other cells. *Cell Capacity Class Value* IE only indicates resources that are configured for traffic purposes.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink Cell Capacity Class Value	М		INTEGER(1. .100,)	Value 1 shall indicate the minimum uplink cell capacity, and 100 shall indicate the maximum uplink cell capacity. . There should be linear relation between uplink cell capacity and Uplink Cell Capacity Class Value.
Downlink Cell Capacity Class Value	M		INTEGER(1. .100,)	Value 1 shall indicate the minimum downlink cell capacity, and 100 shall indicate the maximum downlink cell capacity. There should be linear relation between downlink cell capacity and Downlink Cell Capacity Class Value.

NOTE: Cell capacity class for GERAN cells is defined by the number of configured carriers in specific GERAN cells which ranges from integer 1 to 100. The value 1 shall indicate the minimum cell capacity and the value 100 shall indicate the maximum cell capacity.

## 9.2.1.5D Cell Global Identifier (CGI)

The Cell Global Identifier IE contains the Cell Global Identity as defined in TS 23.003 [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
LAI		1		
>PLMN Identity	Μ		OCTET STRING (3)	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler</li> <li>bit 4 to 1 of octet n encoding digit 2n-1</li> <li>bit 8 to 5 of octet n encoding digit 2n</li> <li>The PLMN Identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>
>LAC	М		OCTET STRING (2)	0000 and FFFE not allowed.
CI	М		OCTET STRING (2)	

# 9.2.1.6 Cell Identifier (C-ID)

The C-ID (Cell Identifier) is the identifier of a cell in one RNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
C-ID			INTEGER	
			(065535)	

# 9.2.1.7 Cell Individual Offset

Cell individual offset is an offset that will be applied by UE to the measurement results for a Primary-CPICH[FDD]/ Primary-CCPCH[TDD] or for GSM Carrier RSSI according to TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Individual Offset			INTEGER( -20+20)	-20 -> -10dB -19 -> -9.5dB  +20 -> +10dB

# 9.2.1.8 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 TS 25.223 [13]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Parameter ID			INTEGER(0. .127,)	

# 9.2.1.9 CFN

Connection Frame Number for the radio connection, see TS 25.402 [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CFN			INTEGER(0. . 255)	

# 9.2.1.10 CFN Offset

Void

## 9.2.1.11 CN CS Domain Identifier

Identification of the CN node in the CS Domain.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLMN Identity	М		OCTET STRING (3)	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler</li> <li>bit 4 to 1 of octet n encoding digit 2n-1</li> <li>bit 8 to 5 of octet n encoding digit 2n</li> <li>The PLMN Identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>
LAC	М		OCTET STRING (2)	0000 and FFFE not allowed.

# 9.2.1.11A CN Domain Type

Identifies the type of core network domain.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CN Domain Type			ENUMERAT ED(CS domain, PS domain, Don't care,)	See in TS 25.331 [16].

#### 9.2.1.12 CN PS Domain Identifier

Identification of the CN Node in the PS Domain.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLMN Identity	М		OCTET STRING (3)	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler</li> <li>bit 4 to 1 of octet n</li> <li>encoding digit 2n-1</li> <li>bit 8 to 5 of octet n</li> <li>encoding digit 2n</li> <li>The PLMN Identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>
LAC	м		OCTET STRING (2)	0000 and FFFE not allowed.
RAC	М		OCTET STRING (1)	

## 9.2.1.12A 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 9.2.1.59B	
>T <sub>UTRAN-GANSS</sub> Measurement Accuracy Class				
>>T <sub>UTRAN-GANSS</sub> Measurement Accuracy Class	М		T <sub>UTRAN-GANSS</sub> Accuracy Class 9.2.1.112	

# 9.2.1.12B Common Measurement Object Type

Void.

# 9.2.1.12C Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
Common Measurement Type			Reference ENUMERATED (UTRAN GPS	UL timeslot ISCP shall only be used by TDD.
			Timing of Cell Frames for UE Positioning ,	For measurements, which are requested on the lur-g interface, only load, RT Load
			SFN-SFN Observed Time	and NRT Load information are used.
			Difference, load,	"UpPTS interference" is used by 1.28Mcps TDD only
			transmitted carrier power, received total	"UpPTS interference" means "UpPCH interference" in the whole 25.423, refer to TS
			wide band power, UL	25.225 [14] and TS 25.224 [22].
			timeslot ISCP, , RT Load, NRT Load	
			Information, UpPTS	
			interference, UTRAN	
			GANSS Timing of Cell Frames for UE	
			Positioning)	

# 9.2.1.12D 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			•	_	
> T <sub>UTRAN-GPS</sub> Measurement Value Information				UTRAN only.	-	
>>T <sub>UTRAN-GPS</sub> Measurement Value Information	M		9.2.1.59D		-	
> SFN-SFN Measurement Value Information				UTRAN only.	-	
>>SFN-SFN Measurement Value Information	M		9.2.1.52C		_	
>Load Value					_	
>>Load Value	М		9.2.1.33A		-	
>Transmitted Carrier Power Value				UTRAN only.	_	
>>Transmitted Carrier Power Value	М		Transmitted Carrier Power 9.2.1.59A		_	
>Received Total Wide Band Power Value				UTRAN only.	-	
>>Received Total Wide Band Power Value	М		Received Total Wide Band Power 9.2.2.35A		_	
>UL Timeslot ISCP Value				TDD Only.	_	
>>UL Timeslot ISCP Value	М		UL Timeslot ISCP 9.2.3.13A		_	
>Additional Common Measurement Values					-	
>>RT Load Value			_		_	
>>>RT Load Value	М		9.2.1.50B		YES	ignore
>>NRT Load Information Value					_	
>>>NRT Load Information Value	М		9.2.1.411		YES	ignore
>>UpPTS interference				1.28Mcps TDD Only.	-	
>>>UpPTS interference Value	М		INTEGER (0127,)	According to mapping in TS 25.123 [24].	YES	reject
>> T <sub>UTRAN-GANSS</sub> Measurement Value Information				UTRAN only.	-	
>>>T <sub>UTRAN-GANSS</sub> Measurement Value Information	М		9.2.1.114		YES	reject

## 9.2.1.12E 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	М			
>Measurement Available				
>>Common Measurement Value	М		9.2.1.12D	
>Measurement not Available			NULL	

## 9.2.1.12F Common Transport Channel Resources Initialisation Not Required

If present, this IE indicates that as far as the DRNC is concerned, there is no need to initiate a Common Transport Channel Resources Initialisation procedure if the SRNC wants to allocate common transport channel resources in the new cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport			ENUMERAT	
Channel Resources			ED(Not	
Initialisation Not Required			Required)	

# 9.2.1.12G Coverage Indicator

The Coverage Indicator indicates whether the serving and the neighbouring cell are overlapped, i.e. the cells have approximately same coverage area or whether the neighbouring cell covers or contained in the serving cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Coverage Indicator			ENUMERAT ED(Overlap, Covers,	
			Contained in,)	

#### 9.2.1.13 Criticality Diagnostics

The *Criticality Diagnostics* IE is sent by an RNC when parts of a received message have not been comprehended or were 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		-	
>Ddmode	М		ENUMERATED( FDD, TDD, Common)	Common = common to FDD and TDD. Common Ddmode is also applicable for lur- g procedures listed in section 7.	_	
Triggering Message	0		ENUMERATED(i nitiating 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(r eject, ignore, notify)	This Procedure Criticality is used for reporting the Criticality of the Triggering message (Procedure).	_	
Transaction ID	0		Transaction ID		_	
Information Element Criticality Diagnostics		0 <max NrOfErr ors&gt;</max 			_	
>IE Criticality	М		ENUMERATED(r eject, ignore, notify)	The IE Criticality is used for reporting the criticality of the triggering IE. The value "Ignore" shall never be used.	_	
>IE ID	M		INTEGER(0655 35)	The IE ID of the not understood or missing IE as defined in the ASN.1 part of the specification.	_	
>Repetition Number	0		INTEGER(0255 )	The Repetition Number IE gives • in case of a not understood IE: The number of occurrences of the reported IE up to and including the not understood occurrence • in case of 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	9.2.1.39A	The Message Structure IE describes the structure in which 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
maxNrOfErrors	Maximum number of IE errors allowed to be reported with a single
	message.

### 9.2.1.14 C-RNTI

C-RNTI (Cell RNTI) is the UE identifier allocated by the DRNS to be used over the radio interface. It is unique in the cell. One UE Context has one unique C-RNTI value allocated in the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
C-RNTI			INTEGER(0. .65535)	

# 9.2.1.14A CTFC

The CTFC is an integer number calculated in accordance with TS 25.331 [16], 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				
>2 bits long				
>>CTFC value	М		INTEGER (03)	
>4 bits long				
>>CTFC value	М		INTEGER (015)	
>6 bits long				
>>CTFC value	М		INTEGER (063)	
>8 bits long				
>>CTFC value	М		INTEGER (0255)	
>12 bits long				
>>CTFC value	М		INTEGER (04095)	
>16 bits long				
>>CTFC value	М		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: I
	$\sum_{i=1}^{i} (L_i - 1)P_i$ with the notation according to TS 25.331 [16].

### 9.2.1.15 DCH Combination Indicator

Void

#### 9.2.1.16 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)	

#### 9.2.1.16A DCH Information Response

The DCH Information IE provides information for DCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCH Information Response		1 <maxnr OfDCHs&gt;</maxnr 		Several DCHs belonging to the same set of coordinated DCHs may be included.	-	
>DCH ID	М		9.2.1.16		-	
>Binding ID	0		9.2.1.3		_	
>Transport Layer Address	0		9.2.1.62		_	
>Allowed Rate Information	0		9.2.1.2A		YES	ignore
>Transport Bearer Not Setup Indicator	0		9.2.2.4T	FDD Only.	YES	Ignore

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

## 9.2.1.17 Dedicated Measurement Object Type

Void.

#### 9.2.1.18 Dedicated Measurement Type

The Dedicated Measurement Type identifies the type of measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Type			ENUMERAT ED(SIR, SIR Error, Transmitted Code Power, RSCP, Rx Timing Deviation, Round Trip Time,, Rx Timing Deviation LCR, Angle Of Arrival LCR, HS-SICH Reception Quality, Rx Timing Deviation 768, Rx Timing Deviation 384 Extended, UE transmission power headroom)	RSCP and HS-SICH Receptions Quality are used by TDD only, Rx Timing Deviation and Rx Timing Deviation 384 Extended are used by 3.84 Mcps TDD only, Rx Timing Deviation LCR is used by 1.28 TDD only, Round Trip Time, SIR Error are used by FDD only. Angle Of Arrival LCR is used by 1.28Mcps TDD only. Rx Timing Deviation 768 is used by 7.68Mcps TDD only. "UE transmission power headroom" is used by FDD, 1.28Mcps TDD, 3.84Mcps TDD and 7.68Mcps TDD.

NOTE: For definitions of the measurement types refer to TS 25.215 [11] and TS 25.225 [14].

## 9.2.1.19 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 Measurement Value	М				-	
>SIR Value					_	
>>SIR Value	М		INTEGER( 063)	According to mapping in TS 25.133 [23] and TS 25.123 [24].	_	
>SIR Error Value				FDD Only	_	
>>SIR Error Value	М		INTEGER( 0125)	According to mapping in TS 25.133 [23].	-	
>Transmitted Code Power Value					-	
>>Transmitted Code Power Value	М		INTEGER( 0127)	According to mapping in TS 25.133 [23] and TS 25.123 [24] Values 0 to 9 and 123 to 127 shall not be used.	_	
>RSCP				TDD Only.	-	
>>RSCP	Μ		INTEGER( 0127)	According to mapping in TS 25.123 [24].	_	
>Rx Timing Deviation Value				3.84Mcps TDD Only.	-	
>>Rx Timing Deviation	M		INTEGER( 08191)	According to mapping in TS 25.123 [24].	_	
>Round Trip Time				FDD Only.	-	
>>Round Trip Time	М		INTEGER( 032767)	According to mapping in TS 25.133 [23].	-	
>Additional Dedicated Measurement Values					Ι	
>>Rx Timing Deviation Value LCR				1.28Mcps TDD Only.	YES	reject
>>>Rx Timing Deviation LCR	Μ		INTEGER( 0511)	According to mapping in TS 25.123 [24].	-	
>>Angle of Arrival Value LCR				1.28Mcps TDD only.	YES	reject
>>>AOA LCR	M		INTEGER( 0719)	According to mapping in TS 25.123 [24].	-	
>>>AOA LCR Accuracy Class	М		ENUMER ATED(A, B, C, D, E, F, G, H,)	According to mapping in TS 25.123 [24]	-	
>>HS-SICH reception quality				Applicable to TDD only.	YES	reject
>>>HS-SICH reception quality Value		1			-	
>>>Failed HS-SICH	М		INTEGER (020)	According to mapping in	Ι	

			TS 25.123 [24].		
>>>Missed HS-SICH	M	INTEGER (020)	According to mapping in TS 25.123 [24].	_	
>>>Total HS-SICH	Μ	INTEGER (020)	According to mapping in TS 25.123 [24].	-	
>>Rx Timing Deviation Value 7.68Mcps			7.68Mcps TDD Only.	YES	reject
>>>Rx Timing Deviation 7.68Mcps	Μ	INTEGER( 065535)	According to mapping in TS 25.123 [24].	-	
>>Rx Timing Deviation Value 3.84Mcps Extended			3.84 Mcps TDD Only.	YES	reject
>>>Rx Timing Deviation 3.84Mcps Extended	Μ	INTEGER( 032767)	According to mapping in TS 25.123 [24].	-	
>>Extended Round Trip Time			FDD Only.	YES	ignore
>>>Extended Round Trip Time Value	M	INTEGER (3276710 3041)	Continuation of intervals with step size as defined in TS 25.133 [23].	_	
>>UE transmission power headroom				YES	reject
>>>UE transmission power headroom	M	INTEGER (031)	According to mapping in TS 25.133 [23] and TS 25.123 [24].	-	_

## 9.2.1.19A 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 and if provided also the Dedicated Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Measurement Availability Indicator	М				-	
>Measurement Available					_	
>>Dedicated Measurement Value	М		9.2.1.19		-	
>>CFN	0		9.2.1.9	Dedicated Measuremen t Time Reference.	_	
>Measurement not Available			NULL		_	

# 9.2.1.19Aa 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	Μ			
>CFN				
>>Activation CFN	Μ		CFN 9.2.1.7	
>Separate Indication			NULL	

# 9.2.1.19Ab 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
CHOICE Delayed Activation	Μ			
Update				
>Activate				
>>CHOICE Activation Type	М			
>>>Synchronised				
>>>>Activation CFN	М		CFN 9.2.1.7	
>>>Unsynchronised			NULL	
>>Initial DL TX Power	Μ		DL Power	
			9.2.1.21	
>>First RLS Indicator	0		9.2.2.16A	FDD Only.
>>Propagation Delay	0		9.2.2.33	FDD Only.
>>Extended Propagation Delay	0		9.2.2.33a	FDD Only.
>Deactivate				
>>CHOICE Deactivation type	М			
>>>Synchronised				
>>>>Deactivation CFN	М		CFN 9.2.1.7	
>>>Unsynchronised			NULL	

# 9.2.1.19B 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 RTCM-SC104 [31].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality	
GPS TOW	M		INTEGER(060479 9)	Time in seconds. This field indicates the baseline time for which the corrections are valid.	-		
Status/Health	М		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 DGPS Corrections Information		1 <ma xNoSa t&gt;</ma 			-		
>SatID	М		SAT ID 9.2.1.50A		-		
>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)	Scaling factor 0.32 meters.	-		
>Range Correction Rate	М		INTEGER(-127 127)	Scaling factor 0.032 m/s.	-		
>DGNSS Validity Period	0		9.2.1.138		YES	ignore	

Range Bound	Explanation			
maxNoSat	Maximum number of satellites for which information can be			
	provided.			

# 9.2.1.19C 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 DRNS shall use this information to discard out-of-date MAC-hs SDUs from the HSDPA Priority Queues.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Discard Timer			ENUMERAT	Unit: ms
			ED (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,	
			)	

## 9.2.1.20 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 Reference	Semantics Description
Diversity Control Field			ENUMERAT ED(May, Must, Must not, )	

## 9.2.1.21 Diversity Indication

Void.

#### 9.2.1.21A DL Power

The *DL Power* IE indicates a power level relative to 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. If referred to an F-DPCH, it indicates the Reference F-DPCH TX Power.] 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.

[TDD – If referred to a DPCH, it indicates the power of a spreading factor 16 code, the power for a spreading factor 1 code would be 12 dB higher.]

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 Step 0.1dB

# 9.2.1.22 Downlink SIR Target

Void

## 9.2.1.23 DPCH Constant Value

DPCH Constant Value is the power margin used by a UE to set the proper uplink power.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPCH Constant Value			INTEGER (- 1010)	Unit dB Granularity 1 dB.

## 9.2.1.24 D-RNTI

The D-RNTI identifies the UE Context in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
D-RNTI			INTEGER(0. .2^20 –1)	

#### 9.2.1.25 D-RNTI Release Indication

The D-RNTI Release Indication indicates whether or not a DRNC shall release the D-RNTI allocated for a particular UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
D-RNTI Release Indication			ENUMERAT	
			ED(Release	
			D-RNTI, not	
			Release	
			D-RNTI)	

# 9.2.1.26 DRX Cycle Length Coefficient

The DRX Cycle Length Coefficient is used as input for the formula to establish the paging occasions to be used in DRX.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DRX Cycle Length			INTEGER	Refers to 'k' in the formula as
Coefficient			(39)	specified in TS 25.304 [15],
				Discontinuous Reception.

## 9.2.1.26A DSCH ID

Void.

9.2.1.26Aa DSCH Initial Window Size

Void.

9.2.1.26B DSCH Flow Control Information

Void.

## 9.2.1.26Ba DSCH-RNTI

Void.

# 9.2.1.26Bb Extended GSM Cell Individual Offset

Extended GSM Cell individual offset is an offset that will be applied by UE to the measurement results for GSM carrier RSSI according to TS 25.331 [16]. It shall be used when the offset exceeds the range of values that can be indicated using the *Cell Individual Offset* IE (Subclause 9.2.1.7).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended GSM Cell Individual Offset			INTEGER (- 5011   1150)	Unit in dB. Step size is 1 dB.

# 9.2.1.26C FACH Flow Control Information

The FACH Flow Control Information IE provides flow control information for each scheduling priority class for the FACH FP over Iur.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
FACH Flow Control Information		116			_	
>FACH Scheduling Priority	M		Scheduling Priority Indicator 9.2.1.51A		_	
>MAC-c/sh SDU Length		1 <maxnr OfMACcsh SDU- Length&gt;</maxnr 			-	
>>MAC-c/sh SDU Length	М		9.2.1.34		_	
>FACH Initial Window Size	М		9.2.1.27		-	

Range bound	Explanation	
maxNrOfMACcshSDU-Length	Maximum number of different MAC-c/sh SDU lengths.	

# 9.2.1.27 FACH Initial Window Size

Indicates the initial number of MAC-c/sh SDUs that may be transmitted before an acknowledgement is received from the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FACH Initial Window Size			INTEGER(0. .255)	Number of frames (MAC-c/sh SDUs). 255 = Unlimited number of FACH data frames.

# 9.2.1.28 FACH Priority Indicator

Void

#### 9.2.1.28A FN Reporting Indicator

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			ENUMERAT ED(FN	
			reporting	
			required, FN reporting not	
			required)	

#### 9.2.1.29 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,
			(0.1.0)	15=Highest Priority.

#### 9.2.1.30 Frame Offset

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 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.

### 9.2.1.30A GA Point with Uncertainty

This IE contains one of the possible descriptions of a Cell Geographical Area.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	М		9.2.1.30F	
Uncertainty Code	М		INTEGER( 0127)	The uncertainty "r" is derived from the "uncertainty code" k by $r = 10x(1.1^{k}-1)$ .

#### 9.2.1.30B GA Ellipsoid Point with Uncertainty Ellipse

This IE contains one of the possible descriptions of a Cell Geographical Area.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	Μ		9.2.1.30F	
Uncertainty Ellipse	М		9.2.1.68A	
Confidence	М		INTEGER(	
			0127)	

# 9.2.1.30C GA Ellipsoid Point with Altitude

This IE contains one of the possible descriptions of a Cell Geographical Area.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	М		9.2.1.30F	
Altitude and direction	М		9.2.1.2B	

### 9.2.1.30D GA Ellipsoid Point with Altitude and Uncertainty Ellipsoid

This IE contains one of the possible descriptions of a Cell Geographical Area.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Geographical Coordinates	Μ		9.2.1.30F	
Altitude and direction	Μ		9.2.1.2B	
Uncertainty Ellipse	М		9.2.1.68A	
Uncertainty Altitude	М		INTEGER(	
			0127)	
Confidence	М		INTEGER(	
			0127)	

# 9.2.1.30E GA Ellipsoid Arc

This IE contains one of the possible descriptions of a Cell Geographical Area.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	M		9.2.1.30F	
Inner radius	M		INTEGER( 02 <sup>16</sup> -1)	The relation between the value (N) and the radius I in meters it describes is $5N \le r$ < $5(N+1)$ , except for N=2 <sup>16</sup> -1 for which the range is extended to include all grater values of I.
Uncertainty radius	M		INTEGER( 0127)	The uncertainty "r" is derived from the "uncertainty code" k by $r = 10x(1.1^{k}-1)$
Offset angle	М		INTEGER( 0179)	The relation between the value (N) and the angle (a) in degrees it describes is $2N \le a < 2(N+1)$ .
Included angle	М		INTEGER( 0179)	The relation between the value (N) and the angle (a) in degrees it describes is $2N < a \le 2(N+1)$ .
Confidence	М		INTEGER( 0127)	

#### 9.2.1.30F Geographical Coordinates

This IE contains the description of geographical coordinates.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	М		ENUMERAT ED(North, South)	
Degrees Of Latitude	M		INTEGER( 02 <sup>23</sup> -1)	The IE value (N) is derived by this formula: $N \le 2^{23} X /90 < N+1$ 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: $N \le 2^{2^4} X / 360 < N+1$ X being the longitude in degree (-180°+180°).

# 9.2.1.30Fa GERAN Cell Capability

The GERAN Cell Capability IE is used to transfer the capabilities of a certain GERAN cell via the Iur interface.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
GERAN Cell Capability	Μ		BIT STRING (16)	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: A/Gb mode. The second bit: Iu mode. 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.

### 9.2.1.30Fb GERAN Classmark

The *GERAN Classmark* IE is used to transfer the capabilities of a certain GERAN Iu-mode capable cell via the Iur interface.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
GERAN Classmark	М		OCTET STRING	Contents defined in TS 48.008 [38].

#### 9.2.1.30Fc GERAN System Information

The GERAN System Information IE provides GERAN specific information.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GERAN System Info		1 <maxnrofger ANSI&gt;</maxnrofger 		
>GERAN System Info Block	М		OCTET STRING (123)	The first octet contains octet 1 of the GERAN system information block, the second octet contains octet 2 of the GERAN system information block and so on.

Range bound	Explanation
maxNrOfGERANSI	Maximum number of GERAN SI blocks that can be provided as part of NACC information.

# 9.2.1.30G GPS Almanac

This IE provides the information regarding the GPS Almanac. For further details on the meaning of parameters, see ICD-GPS-200 [30].

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
WNa	М		BIT STRING(8)	2000	_	er neuneg
Satellite Almanac Information	M	1 <maxn rOfSatAI manac- maxNoS at&gt;</maxn 		See Note 1.	_	
>DataID	М		INTEGER (03)		-	
>SatID	М		SAT ID 9.2.1.50A		-	
>e	Μ		BIT STRING(16)		-	
>t <sub>oa</sub>	Μ		BIT STRING(8)		_	
>бі	М		BIT STRING(16)		-	
>OMEGADOT	М		BIT STRING(16)		-	
>SV Health	М		BIT STRING(8)		_	
>A <sup>1/2</sup>	М		BIT STRING(24)		_	
>OMEGA <sub>0</sub>	М		BIT STRING(24)		-	
>M0	М		BIT STRING(24)		-	
>0)	М		BIT STRING(24)		-	
>af <sub>0</sub>	М		BIT STRING(11)		-	
>af <sub>1</sub>	М		BIT STRING(11)		-	
SV Global Health	0		BIT STRING(364)		-	
Complete Almanac Provided	0		BOOLEAN	This field indicates whether almanac is provided for the full GPS constellation or not. TRUE means complete GPS almanac is provided.	YES	ignore
Note 1: This information element is a simplified representation of the ASN.1 description. Repetitions 1 through maxNoSat and repetitions maxNoSat+1 through maxNrOfSatAlmanac-maxNoSat are represented by separate ASN.1 structures with different criticality.						

Range Bound	Explanation
maxNrOfSatAlmanac-maxNoSat	Maximum number of satellite almanacs for which information
	can be provided.

# 9.2.1.30H GPS Ionospheric Model

This IE provides the information regarding the GPS Ionospheric Model. For further details on the meaning of parameters, see ICD-GPS-200 [30].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
αο	М		BIT STRING(8)	
α <sub>1</sub>	M		BIT STRING(8)	
α <sub>2</sub>	М		BIT STRING(8)	
α <sub>3</sub>	M		BIT STRING(8)	
βο	M		BIT STRING(8)	
β1	М		BIT STRING(8)	
β <sub>2</sub>	M		BIT STRING(8)	
β <sub>3</sub>	М		BIT STRING(8)	

# 9.2.1.30I GPS Navigation Model and Time Recovery

This IE contains subframes 1 to 3 of the GPS navigation message. For further details on the meaning of parameters, see ICD-GPS-200 [30].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Navigation Message 1to3		1 <maxnosat></maxnosat>		•
>Transmission TOW	M		INTEGER010485 75)	Time of the Week when the message is broadcast.
>SatID	М		SAT ID 9.2.1.50A	
>TLM Message	М		BIT STRING(14)	
>TIm Revd I	Μ		BIT STRING(2)	
>HO-Word	М		BIT STRING(22)	
>WN	М		BIT STRING(10)	
>C/A or P on L2	Μ		BIT STRING(2)	
>User Range Accuracy Index	М		BIT STRING(4)	
>SV Health	М		BIT STRING(6)	
>IODC	М		BIT STRING(10)	
>L2 P Data Flag	М		BIT STRING(1)	
>SF 1 Reserved	М		BIT STRING(87)	
>T <sub>GD</sub>	М		BIT STRING(8)	
>t <sub>oc</sub>	М		BIT STRING(16)	
>af <sub>2</sub>	М		BIT STRING(8)	
>af <sub>1</sub>	М		BIT STRING(16)	
>af <sub>0</sub>	М		BIT STRING(22)	
>C <sub>rs</sub>	М		BIT STRING(16)	
>∆n	М		BIT STRING(16)	
>M <sub>0</sub>	М		BIT STRING(32)	
>C <sub>uc</sub>	М		BIT STRING(16)	
>e	М		BIT STRING(32)	
>C <sub>us</sub>	М		BIT STRING(16)	
>(A) <sup>1/2</sup>	М		BIT STRING(32)	
>t <sub>oe</sub>	М		BIT STRING(16)	
>Fit Interval Flag	М		BIT STRING(1)	
>AODO	М		BIT STRING(5)	
>C <sub>ic</sub>	М		BIT STRING(16)	
>OMEGA <sub>0</sub>	М		BIT STRING(32)	
>C <sub>is</sub>	Μ		BIT STRING(16)	
>i <sub>0</sub>	М		BIT STRING(32)	
>C <sub>rc</sub>	М		BIT STRING(16)	
>00	М		BIT STRING(32)	
>OMEGAdot	М		BIT STRING(24)	
>ldot	М		BIT STRING(14)	
>Spare/zero fill	М		BIT STRING(20)	

Range Bound	Explanation
maxNoSat	Maximum number of satellites for which information can be
	provided.

# 9.2.1.30J 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 ICD-GPS-200 [30].

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Bad Satellites Presence	Μ			
>Bad Satellites				
>>Satellite Information		1 <maxn oSat&gt;</maxn 		
>>>BadSatID	М		SAT ID 9.2.1.50A	
>No Bad Satellites			NULL	

Range Bound	Explanation
MaxNoSat	Maximum number of satellites for which information can be
	provided.

#### 9.2.1.30K 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
Geographical Coordinates	М		9.2.1.30F	
Altitude and direction	М		9.2.1.2B	

### 9.2.1.30L GPS UTC Model

This IE provides the information regarding the GPS UTC Model. For further details on the meaning of parameters, see ICD-GPS-200 [30].

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
A <sub>1</sub>	Μ		BIT STRING(24)	
A <sub>0</sub>	М		BIT STRING(32)	
t <sub>ot</sub>	М		BIT STRING(8)	
$\Delta t_{LS}$	Μ		BIT STRING(8)	
WNt	Μ		BIT STRING(8)	
WN <sub>LSF</sub>	Μ		BIT STRING(8)	
DN	Μ		BIT STRING(8)	
$\Delta t_{LSF}$	Μ		BIT STRING(8)	

### 9.2.1.30M Guaranteed Rate Information

The *Guaranteed Rate Information* IE indicates the TFI corresponding to the guaranteed bit rate for the uplink and/or the downlink of a DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Guaranteed UL Rate	0		INTEGER(1. .maxNrOfTF s)	"1": TFI 0, "2": TFI 1, "3": TFI 2, …
Guaranteed DL Rate	0		INTEGER(1. .maxNrOfTF s)	"1": TFI 0, "2": TFI 1, "3": TFI 2, 

### 9.2.1.30N HCS Prio

The HCS Prio is the characteristics of the cell as defined in TS 25.304 [15].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HCS Prio			INTEGER (07)	0=Lowest Priority,
			. ,	7=Highest Priority.

# 9.2.1.30NA HS-DSCH Information To Modify Unsynchronised

The *HS-DSCH Information To Modify Unsynchronised* IE is used for modification of HS-DSCH information in a UE 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 <maxn rOfMACd Flows&gt;</maxn 		•	_	
>HS-DSCH MAC-d Flow ID	М		9.2.1.30O		_	
>Allocation/Retention Priority	0		9.2.1.1		-	
>Transport Bearer Request Indicator	М		9.2.1.61		-	
>Traffic Class	0		9.2.1.58A		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
Priority Queue Information		0 <maxn rOfPrioQ ueues&gt;</maxn 			_	
>Priority Queue ID	М		9.2.1.45A		_	
Scheduling Priority	0		9.2.1.51A		-	
>Discard Timer	0		9.2.1.19C		_	
>MAC-hs Guaranteed Bit Rate	Ō		9.2.1.34Aa		-	
CQI Power Offset	0		9.2.2.24b	For FDD only.	_	
ACK Power Offset	0		9.2.2.b	For FDD only.	_	
NACK Power Offset	0		9.2.2.26a	For FDD only.	_	
HS-SCCH Power Offset	0		9.2.2.19d	For FDD only.	_	
TDD ACK NACK Power Offset	0		9.2.3.71	For TDD only.	_	
HARQ Preamble Mode	0		9.2.2.57	For FDD only.	YES	ignore
MIMO Mode Indicator	0		9.2.1.135	For FDD and 1.28Mcps TDD only.	YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A	For FDD only.	YES	ignore
Enhanced HS Serving CC Abort	0		ENUMERAT ED (Abort Enhanced HS Serving CC,)	For FDD only.	YES	reject
UE Support Indicator Extension	0		9.2.2.103		YES	ignore
Power Offset For S-CPICH for MIMO Request Indicator	0		9.2.2.105	For FDD only.	YES	ignore
Single Stream MIMO Mode Indicator	0		9.2.2.107	For FDD only.	YES	reject
MIMO with four transmit antennas Mode Indicator	0		9.2.2.146	For FDD only	YES	reject
Dual Stream MIMO with four transmit antennas Mode Indicator	0		9.2.2.150	For FDD only	YES	reject
Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147	For FDD only	YES	ignore
Multiflow Reconfiguration	0		9.2.2.151	For FDD only	YES	reject

Range Bound	Explanation
maxNrOfMACdFlows	Maximum number of HS-DSCH MAC-d flows.
maxNrOfPrioQueues	Maximum number of Priority Queues.

# 9.2.1.30Na 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 Iur.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH Initial Capacity Allocation		1< maxNrOf PrioQueu es>			-	
>Scheduling Priority Indicator	М		9.2.1.51A		_	
>Maximum MAC-d PDU Size	М		MAC-d PDU Size 9.2.1.34A	Shall be ignored if <i>Maximum</i> <i>MAC-d PDU</i> <i>Size Extended</i> IE is present.	_	
>HS-DSCH Initial Window Size	М		9.2.1.30Nb		_	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.34D		YES	ignore

Range Bound	Explanation
maxNrOfPrioQueues	Maximum number of Priority Queues.

# 9.2.1.30Nb 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 DRNC.

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.

#### 9.2.1.300 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)	

# 9.2.1.30OA 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 UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		1 <maxn rOfMACd Flows&gt;</maxn 			-	
>HS-DSCH MAC-d Flow ID	М		9.2.1.300		_	
>Allocation/Retention Priority	М		9.2.1.1		_	
>Traffic Class	М		9.2.1.58A		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TrCH Source Statistics Descriptor	0		9.2.1.65		YES	ignore
Priority Queue		1 <maxn< td=""><td></td><td></td><td>_</td><td></td></maxn<>			_	
Information		rOfPrioQ				
> Priority Quoue ID	М	ueues>	9.2.1.45A			
>Priority Queue ID >Associated HS-DSCH	M		HS-DSCH	The HS-DSCH	_	
MAC-d Flow			MAC-d Flow ID 9.2.1.30O	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		9.2.1.51A		_	
>T1	М		9.2.1.54A		-	
>Discard Timer	0		9.2.1.19C		-	
>MAC-hs Window Size >MAC-hs Guaranteed Bit Pate	M O		9.2.1.34C 9.2.1.34Aa		-	
Rate >MAC-d PDU Size		1 <maxn< td=""><td></td><td></td><td>_</td><td></td></maxn<>			_	
Index		rOfPDUIn dexes>				
>>SID	М		9.2.1.52D	Shall be ignored if <i>Maximum</i> <i>MAC-d PDU</i> <i>Size extended</i> IE is present.	-	
>>MAC-d PDU Size	М		9.2.1.34A	Shall be ignored if <i>Maximum</i> <i>MAC-d PDU</i> <i>Size extended</i>	_	

			IE is present.		
>RLC Mode	М	9.2.1.48D		-	
>Maximum MAC-d PDU Size extended	0	MAC PDU Size Extended 9.2.1.34D		YES	reject
>DL RLC PDU Size Format	0	9.2.1.136		YES	ignore
>UE Aggregate Maximum Bit Rate Enforcement Indicator	0	NULL		YES	ignore

Range Bound	Explanation
maxNrOfMACdFlows	Maximum number of HS-DSCH MAC-d flows.
maxNrOfPrioQueues	Maximum number of Priority Queues.
maxNrOfPDUIndexes	Maximum number of different MAC-d PDU SIDs.

# 9.2.1.30OB 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 UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flows To Delete		1 <maxnr OfMACdFl ows&gt;</maxnr 		
>HS-DSCH MAC-d Flow ID	М		9.2.1.30O	

Range Bound	Explanation
maxNrOfMACdFlows	Maximum number of HS-DSCH MAC-d flows.

### 9.2.1.30OC 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 TS 25.425 [32] and TS 25.321 [41].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d PDU Size			ENUMERATED	
Format			(Indexed MAC-d	
			PDU Size, Flexible	
			MAC-d PDU Size)	

### 9.2.1.30Oa 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 TS 25.306 [42].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Physical Layer Category			INTEGER (164,)	

# 9.2.1.30P HS-DSCH-RNTI

The HS-DSCH-RNTI is needed 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)	

# 9.2.1.30Q HS-DSCH Information To Modify

The HS-DSCH Information To Modify IE is used for modification of HS-DSCH information in a UE Context.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow	-	0	Reference			
Specific Information		0 <maxn rOfMACd Flows&gt;</maxn 			_	
>HS-DSCH MAC-d Flow ID	М		9.2.1.300		_	
>Allocation/Retention Priority	0		9.2.1.1		-	
>Transport Bearer Request Indicator	М		9.2.1.61		_	
>Traffic Class	0		9.2.1.58A		-	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	-	
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
Priority Queue Information		0 <maxn rOfPrioQ ueues&gt;</maxn 			_	
>CHOICE Priority Queue	М				-	
>>Add Priority Queue					_	
>>>Priority Queue ID	М		9.2.1.45A		_	
>>>Associated HS-DSCH MAC-d Flow >>>Scheduling Priority	M		HS-DSCH MAC-d Flow ID 9.2.1.300 9.2.1.51A	Shall only refer to a 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.	-	
Indicator	IVI		9.2.1.5TA		_	
>>>T1	М		9.2.1.54A		_	
>>>Discard Timer	0		9.2.1.19C		-	
>>>MAC-hs Window Size	M	1	9.2.1.34C		-	
>>>MAC-hs Guaranteed Bit Rate	0		9.2.1.34Aa		-	
>>>MAC-d PDU Size Index		1 <maxn rOfPDUIn dexes&gt;</maxn 			-	
>>>SID	М		9.2.1.52D	Shall be ignored if <i>Maximum</i> <i>MAC-d PDU</i> <i>Size extended</i> IE is present.	-	
>>>>MAC-d PDU Size	M		9.2.1.34A	Shall be ignored if <i>Maximum</i> MAC-d PDU	-	

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
			Reference	Size extended		
				IE is present.		
>>>RLC Mode	M		9.2.1.48D		-	·
>>>Maximum MAC-d	0		MAC PDU		YES	reject
PDU Size extended			Size Extended			
			9.2.1.34D			
>>>DL RLC PDU Size	0		9.2.1.34D 9.2.1.136		Yes	ignore
Format	Ŭ		3.2.1.130		163	ignore
>>Modify Priority Queue					_	
>>>Priority Queue ID	М		9.2.1.45A	Shall only refer to a Priority Queue already existing in the old configuration.	-	
>>>Scheduling Priority Indicator	0		9.2.1.51A		-	
>>>T1	0		9.2.1.54A		_	
>>>Discard Timer	0		9.2.1.19C		-	
>>>MAC-hs Window Size	0		9.2.1.34C		-	
>>>MAC-hs Guaranteed	0		9.2.1.34Aa		_	
Bit Rate						
>>>MAC-d PDU Size Index		0 <maxn rOfPDUIn dexes&gt;</maxn 			_	
>>>>SID	М		9.2.1.52D	Shall be ignored if <i>Maximum</i> <i>MAC-d PDU</i> <i>Size extended</i> IE is present.	_	
>>>>MAC-d PDU Size	М		9.2.1.34A	Shall be ignored if <i>Maximum</i> <i>MAC-d PDU</i> <i>Size extended</i> IE is present.	_	
>>>Maximum MAC-d	0		MAC PDU		YES	reject
PDU Size extended			Size			
			Extended 9.2.1.34D			
>>>DL RLC PDU Size	0		9.2.1.136		Yes	ignore
Format	Ū		0.2.11100		100	ignore
>>Delete Priority Queue					_	
>>>Priority Queue ID	M		9.2.1.45A	Shall only refer to a Priority Queue already existing in the old configuration.	-	
MAC-hs Reordering Buffer Size for RLC-UM	0		9.2.1.34Ab		_	
CQI Feedback Cycle k	0		9.2.2.24a	For FDD only.	-	
CQI Repetition Factor	0		9.2.2.24c	For FDD only.	_	
ACK-NACK Repetition Factor	0		9.2.2.a	For FDD only.	_	
CQI Power Offset	0		9.2.2.24b	For FDD only.	-	
ACK Power Offset	0		9.2.2.b	For FDD only.		
NACK Power Offset	0		9.2.2.26a	For FDD only.	_	
HS-SCCH Power Offset	0		9.2.2.19d	For FDD only.	_	
HS-SCCH Code Change Grant	0		9.2.1.30S		—	
TDD ACK NACK Power Offset	0		9.2.3.71	For TDD only.	_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HARQ Preamble Mode	0		9.2.2.57	For FDD only.	YES	ignore
HS-PDSCH Code Change Grant	0		9.2.1.30W	For FDD only.	YES	ignore
MIMO Mode Indicator	0		9.2.1.135	For FDD and 1.28Mcps TDD only.	YES	reject
HS-DSCH MAC-d PDU Size Format	0		9.2.1.30O C		YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A	For FDD only.	YES	ignore
UE Capabilities Information	0				YES	ignore
>HS-DSCH Physical Layer Category	М		9.2.1.30O a		-	
>1.28 Mcps TDD uplink physical channel capability	0		9.2.3.10D	Applicable to 1.28Mcps TDD only.	YES	ignore
>Number of Supported Carriers	0		ENUMER ATED ( One-one carrier, One-three carrier, Three- three carrier, Tree-six carrier, Six-six carrier, Discontigu ous, Two- Two carrier Discontigu ous, One- Two carrier Contiguou s, Two- Two carrier Contiguou s, Two- Two carrier Contiguou s, Two- Two carrier Contiguou s, Two- Two carrier	Applicable to 1.28Mcps TDD only This IE indicates the number of carrier that UE can support at the same time, where " One-three carrier" means the number of supported carrier is one for the uplink, and three for the downlink. One-Two carrier Discontiguous and Two-Two carrier Discontiguous mean that the UE is capable of supporting two non- adjacent carriers. One-Two carrier Contiguous mean that the UE is capable of supporting two non- adjacent carrier Contiguous and Two-Two carrier Contiguous mean that the UE is only capable of supporting two adjacent carriers.	YES	reject
>MIMO SF Mode Supported For HS-PDSCH dual stream	0		ENUMER ATED (SF1,	Applicable to 1.28Mcps TDD only.	YES	ignore
>Multi-carrier HS-DSCH Physical Layer Category	0		SF1/SF16) 9.2.1.300 a	Applicable to 1.28Mcps	YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				TDD only.		
>UE TS0 Capability LCR	0		ENUMER ATED (TS0 Capable, TS0 Non- Capable)	Applicable to 1.28Mcps TDD only.	YES	ignore
>UE RF Band Capability LCR	C- NofSupport edCarriers		9.2.3.84	Applicable to 1.28Mcps TDD only.	YES	ignore
Enhanced HS Serving CC Abort	0		ENUMER ATED (Abort Enhanced HS Serving CC,)	For FDD only.	YES	reject
UE Support Indicator Extension	0		9.2.2.103		YES	ignore
Power Offset For S-CPICH for MIMO Request Indicator	0		9.2.2.105	For FDD only.	YES	ignore
Single Stream MIMO Mode Indicator	0		9.2.2.107	For FDD only.	YES	reject
MIMO with four transmit antennas Mode Indicator	0		9.2.2.146	For FDD only	YES	reject
Dual Stream MIMO with four transmit antennas Mode Indicator	0		9.2.2.150	For FDD only	YES	reject
Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147	For FDD only	YES	ignore
Multiflow Reconfiguration	0		9.2.2.151	For FDD only	YES	reject

Condition	Explanation
NofSupportedCarriers	This IE shall be present if the Number of Supported Carriers IE is equal
	to "One-Two carrier Discontiguous" or "Two-Two carrier Discontiguous"
	and the concerned cell and the UE support more than one RF band.

Range bound	Explanation
maxNrOfMACdFlows	Maximum number of MAC-d flows.
maxNrOfPrioQueues	Maximum number of Priority Queues.
maxNrOfPDUIndexes	Maximum number of MAC-d PDU Size Indexes
	(SIDs).

#### 9.2.1.30R 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 Indicator			ENUMERAT ED (HS- SCCH Code Change needed)	

# 9.2.1.30S 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			ENUMERAT	
Grant			ED(Change	
			Granted)	

#### 9.2.1.30T IMEI

The IMEI is a permanent UE Equipment Identity, see TS 23.003 [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IMEI			OCTET STRING (SIZE (8))	<ul> <li>hexadecimal digits 0 to F, two hexadecimal digits per octet,</li> <li>each hexadecimal digit encoded 0000 to 1111,</li> <li>1111 used as filler for bits 8 to 5 of last octet.</li> <li>bit 4 to 1 of octet n encoding digit 2n-1.</li> <li>bit 8 to 5 of octet n encoding digit 2n.</li> </ul> Number of hexadecimal digits
				shall be 15.

#### 9.2.1.30U IMEISV

The IMEISV is a permanent UE Equipment Identity, see TS 23.003 [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IMEISV			OCTET STRING (SIZE (8))	<ul> <li>hexadecimal digits 0 to F, two hexadecimal digits per octet,</li> <li>each hexadecimal digit encoded 0000 to 1111,</li> <li>1111 used as filler for bits 8 to 5 of last octet.</li> <li>bit 4 to 1 of octet n encoding digit 2n-1.</li> <li>bit 8 to 5 of octet n encoding digit 2n.</li> </ul> Number of hexadecimal digits
				shall be 16.

# 9.2.1.30V 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 Indicator			ENUMERATED (HS- PDSCH Code Change needed)	

# 9.2.1.30W 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(Chan	
Grant			ge Granted)	

#### 9.2.1.31 IMSI

The IMSI is the permanent UE user Identity, see TS 23.003 [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IMSI			OCTET STRING (SIZE(38))	-Decimal digits coded in BCD. -"1111" used as filler. -bit 4 to 1 of octet n is encoding digit 2n-1. -bit 8 to 5 of octet n is encoding digit 2n.

#### 9.2.1.31A Information Exchange ID

The Information Exchange ID uniquely identifies any requested information per RNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Exchange ID	М		INTEGER(0 2^20-1)	

### 9.2.1.31B Information Exchange Object Type

Void.

#### 9.2.1.31C Information Report Characteristics

The information report characteristics define how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Report Characteristics Type	M			
>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,)	
>>>hour				
>>>>Report Periodicity Value	М		INTEGER (124,)	
>On Modification				
>>Information Threshold	0		9.2.1.31D	

#### 9.2.1.31D 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	Criticality	Assigned Criticality
CHOICE Information Type Item	М				-	
>DGPS Corrections						
>>PRC Deviation	М		ENUMERATED( 1, 2, 5, 10,)	PRC deviation in meters from the previously reported value, which shall trigger a report.	_	
>DGANSS						
>>PRC Deviation	М		ENUMERATED (1, 2, 5, 10,)	PRC deviation in meters from the previously reported value, which shall trigger a report.	_	

# 9.2.1.31E Information Type

The Information Type indicates which kind of information the RNS shall provide.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Information Type Item	Μ		ENUMERATED (UTRAN Access Point Position with Altitude, UTRAN Access Point Position, IPDL Parameters, GPS Information, DGPS Corrections, GPS RX Pos, SFN-SFN Measurement Reference Point Position,, Cell Capacity Class, NACC Related Data, MBMS Bearer Service Full Address, Inter-frequency Cell Information, GANSS Information, DGANSS Corrections, GANSS RX Pos, MBMS Counting Information, MBMS Transmission Mode, MBMS Neighbouring Cell Information, MBMS RLC Sequence Number, ANR Cell Information, Common E- RGCH Cell Information)	For information exchange on the lur-g interface, only the Cell Capacity Class is used. MBMS Counting Information, MBMS Transmission Mode, MBMS Neighbouring Cell Information and MBMS RLC Sequence Numbe shall only be used by FDD.		
GPS Information	C-GPS	1 <max NoGPST ypes&gt;</max 			-	
>GPS Information Item			ENUMERATED (GPS Navigation Model and Time Recovery, GPS Ionospheric Model, GPS UTC Model, GPS Almanac, GPS Real-Time Integrity, )		_	
GANSS Information	C-GANSS		, 		YES	Ignore
>GANSS		01			-	
Common Data >>Ionospheric Model	0		BOOLEAN	True means requested.	-	
>>Additional lonospheric Model	0		Additional Ionospheric Model Request 9.2.1.122d	Presence means requested.	YES	Ignore

>>Earth Orientation Parameters	0		Earth Orientation Parameters Request 9.2.1.122e		YES	Ignore
>GANSS Generic		0 <max< th=""><th>9.2.1.122e</th><th></th><th>_</th><th></th></max<>	9.2.1.122e		_	
Data		NoGANS S>				
>>GANSS ID	0		9.2.1.119		_	
>>GANSS Navigation Model And Time Recovery	0		BOOLEAN	True means requested.	_	
>>GANSS Time Model GNSS- GNSS	0		BIT STRING(9)	Defines the time model 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			_	
>>>>DGANS S Signal ID	М		BIT STRING(8)	Defined in TS 25.331 [16].	_	
>>>>GANSS Data Bit Interval	Μ		INTEGER (015)	Defined in TS 25.331 [16].	_	
>>>Satellite Information		0 <max GANSS Sat&gt;</max 			_	
>>>Sat ID	M		INTEGER(063)	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 9.2.1.122f		YES	Ignore
>>GANSS Additional UTC Models	0		GANSS Additional UTC Models Request 9.2.1.122g		YES	Ignore
>>GANSS Auxiliary Information	0		GANSS Auxiliary Information Request 9.2.1.122h		YES	Ignore
>>SBAS ID	C-GANSS- ID		9.2.1.122b		YES	Ignore

DGANSS Corrections Req	C- DGANSS Correction	1			YES	ignore
	S					
>DGANSS Signal ID	М		BIT STRING(8)	Defined in TS 25.331 [16].	_	
>GANSS ID	0		9.2.1.119		YES	Ignore
MBMS RLC Sequence Number Information	C- MBMSRL CSequenc eNumber			FDD only.	YES	Ignore
>MBMS Cell List		1 <max NrOfCel ls&gt;</max 			-	
>>C-ID	М		9.2.1.6		_	
>>MBMS Bearer Service List		1 <max NrOfMB MSServi ces&gt;</max 			_	
>>>TMGI	Μ		9.2.1.80		_	
>>>Time Stamp	М		9.2.2.98		_	

Condition	Explanation
DGANSSCorrections	The IE shall be present if the Information Type Item IE
	indicates "DGANSS Corrections".
GPS	This IE shall be present if the Information Type Item IE
	indicates "GPS Information".
GANSS	This IE shall be present if the Information Type Item IE
	indicates "GANSS Information".
GANSS-ID	This IE shall be present if the GANSS ID IE indicates "SBAS".
MBMSRLCSequenceNumber	This IE shall be present if the Information Type Item IE
	indicates "MBMS RLC Sequence Number ".

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE.
maxNoGPSTypes	Maximum number of GPS Information Types supported in one Information Exchange.
maxNoGANSS	Maximum number of GANSS Systems.
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.
MaxNrOfCells	Maximum number of cells that can be indicated in the corresponding IE.

#### 9.2.1.31F IPDL Parameters

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE IPDL Parameters					-	
>IPDL FDD Parameters						
>>IPDL FDD parameters	Μ		9.2.2.21B		-	
>IPDL TDD Parameters				Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.		
>>IPDL TDD parameters	Μ		9.2.3.4B		_	
>Additional IPDL Parameters						
>>IPDL TDD Parameters LCR				Applicable to 1.28Mcps TDD only.	_	
>>>IPDL TDD parameters LCR	М		9.2.3.4Bb		YES	reject

# 9.2.1.31G Inter-frequency Cell Information

This IE contains the inter-frequency cell information of a cell in the DRNS broadcased in SIB11 or SIB12.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIB11		02		
>Inter-frequency Cell Indication- SIB11	Μ		Integer(01)	Value tag in 10.3.7.45 in TS 25.331 [16] with the same IE name.
>Inter-frequency Cell List in SIB11		0 <maxcellsib11 OrSIB12&gt;</maxcellsib11 		
>>Inter-frequency Cell Id	М		Integer(031)	The order of the inter- frequency cell in SIB11.
>>DL UARFCN	М		UARFCN 9.2.1.66	
>>UL UARFCN	0		UARFCN 9.2.1.66	If this IE is not present, the default duplex distance defined for the operating frequency band shall be used (TS 25.101 [43]).
>>Primary Scrambling Code	М		9.2.1.45	
SIB12		02		
>Inter-frequency Cell Indication- SIB12	Μ			Value tag in 10.3.7.45 in TS 25.331 [16] with the same IE name.
>Inter-frequency Cell List in SIB12		0 <maxcellsib11 OrSIB12&gt;</maxcellsib11 		
>>Inter-frequency Cell Id			Integer(031)	The order of the inter- frequency cell in SIB12.
>>DL UARFCN	М		UARFCN 9.2.1.66	
>>UL UARFCN	0		UARFCN 9.2.1.66	If this IE is not present, the default duplex distance defined for the operating frequency band shall be used (TS 25.101 [43]).
>>Primary Scrambling Code	М		9.2.1.45	

Range bound	Explanation
maxCellSIB11OrSIB12	Maximum number of inter-frequency cells broadcased in SIB11 or SIB12.

### 9.2.1.32 L3 Information

This parameter contains the Layer 3 Information from a Uu message as received from the UE over the Uu interface or the Layer 3 Information for a Uu message to be sent to a UE by the DRNC, as defined in TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
L3 Information			BIT STRING	The content is defined in TS 25.331 [16].

#### 9.2.1.33 Limited Power Increase

Void.

#### 9.2.1.33A Load Value

The *Load Value* IE contains the total load on the measured object relative to the maximum planned load for both the uplink and downlink. It is defined as the load percentage of the Cell Capacity Class.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink Load Value	М		INTEGER(0. .100)	Value 0 shall indicate the minimum load, and 100 shall indicate the maximum load. Load should be measured on a linear scale.
Downlink Load Value	М		INTEGER(0. .100)	Value 0 shall indicate the minimum load, and 100 shall indicate the maximum load. Load should be measured on a linear scale.

### 9.2.1.34 MAC-c/sh SDU Length

Indicates the MAC-c/sh SDU Length. Which is used for FACH, [TDD – DSCH and USCH]. There may be multiple MAC-c/sh SDU Lengths per priority class.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-c/sh SDU Length			INTEGER(1. .5000)	Size of the MAC-c/sh SDU in number of bits.

### 9.2.1.34A MAC-d PDU Size

The MAC-d PDU Size IE 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.

# 9.2.1.34Aa 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			INTEGER (02^24-1,,	Unit: bit/s.
Rate			2^241,000,000,000)	

### 9.2.1.34Ab 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			INTEGER	Unit: kBytes
Size for RLC-UM			(0300,)	And N kBytes = N*1024
				Bytes.
				The DRNS shall use this
				value to avoid the overflow of the UE buffer.

#### 9.2.1.34B 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)	

### 9.2.1.34C MAC-hs Window Size

The *MAC-hs Window Size* IE is used for MAC-hs/MAC-ehs PDU retransmission as defined in TS 25.321 [41]. [FDD – the values 64, 128 and 256 is only allowed when the MAC header type is MAC-ehs and under conditions defined in TS 25.425 [32]].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-hs Window Size			ENUMERAT ED (4, 6, 8, 12, 16, 24, 32,64, 128, 256)	

#### 9.2.1.34D 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.

#### 9.2.1.35 Maximum Allowed UL Tx Power

Maximum Allowed UL Tx Power is the maximum power that a UE in a particular cell is allowed to transmit.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Allowed UL Tx Power			INTEGER(- 50+33)	dBm.

#### 9.2.1.35A Measurement Availability Indicator

Void

#### 9.2.1.35B Measurement Change Time

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Change Time	Μ		INTEGER (16000,)	Unit: ms Range: 1060000 ms. Step: 10 ms.

#### 9.2.1.36 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			ENUMERAT ED(0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 17, 19,)	

### 9.2.1.36A 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
Measurement Hysteresis Time			INTEGER (16000,)	Unit: ms Range: 1060000 ms. Step: 10 ms.

#### 9.2.1.37 Measurement ID

The Measurement ID uniquely identifies a dedicated measurement within a UE Context or a common measurement within a Distant RNC Context [TDD – or a UE measurement within a UE Context].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement ID			INTEGER(0 2^20-1)	

### 9.2.1.38 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 >SIR	М				-	
>>SIR	М		INTEGER(062)	0: 0 dB 1: 0.5 dB 2: 1 dB  62: 31dB	_	
>SIR Error >>SIR Error	М		INTEGER(0124 )	FDD Only 0: 0 dB 1: 0.5 dB 2: 1 dB  124: 62 dB	_	
>Transmitted Code Power						
>>Transmitted Code Power	М		INTEGER(0112 ,)	0: 0 dB 1: 0.5 dB 2: 1 dB  112: 56 dB	-	
>RSCP >>RSCP	M		INTEGER(0126 )	TDD Only 0: 0 dB 1: 0.5 dB 2: 1 dB  126: 63 dB	-	
>Round Trip Time				FDD Only		
>>Round Trip Time	М		INTEGER(0327 66)	0: 0 chips 1: 0.0625 chips 2: 0.1250 chips  32766: 2047.875 chips	-	
>Additional Measurement Thresholds						
>>Load >>>Load	М		INTEGER(0100 )	Units are the same as for the Uplink <i>Load</i> <i>Value</i> IE and <i>Downlink Load Value</i> IE.	_	
>>Transmitted						
Carrier Power >>>Transmitted Carrier Power	M		INTEGER(0100 )	According to mapping in TS 25.133 [23] and TS 25.123 [24].	YES	reject
>>Received Total Wide Band Power						
>>>Received Total Wide Band Power	М		INTEGER(0620 )	0: 0dB 1: 0.1dB 2: 0.2dB  620: 62dB	YES	reject
>>UL Timeslot ISCP				TDD Only		
>>>UL Timeslot ISCP	М		INTEGER(0126)	0: 0dB 1: 0.5dB 2: 1dB	YES	reject
				126: 63dB		

>>RT Load					
>>>RT Load	М	INTEGER(0100 )	Units are the same as for the Uplink RT Load Value IE and Downlink RT Load Value IE.	YES	reject
>>NRT Load Information					
>>>NRT Load Information	М	INTEGER(03)		YES	reject
>>UpPTS interference			1.28Mcps TDD Only.		
>>>UpPTS interference Value	M	INTEGER (0127,)	According to mapping in TS 25.123 [24].	YES	reject

#### 9.2.1.38A 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	

#### 9.2.1.38B 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	

#### 9.2.1.38C 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	

# 9.2.1.39 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					-	
<u>&gt;SIR</u> >>SIR	M		INTEGER(063)	According to mapping in TS 25.133 [23] and TS 25.123 [24].	_	
>SIR Error				FDD Only		
>>SIR Error	М		INTEGER(0125 )	According to mapping in TS 25.133 [23].	-	
>Transmitted Carrier Power						
>>Transmitted Code Power	М		INTEGER(0127 )	According to mapping in TS 25.133 [23] and TS 25.123 [24].	—	
>RSCP				TDD Only.		
>>RSCP	М		INTEGER(0127 )	According to mapping in TS 25.123 [24].	-	
>Rx Timing Deviation				Applicable to 3.84Mcps TDD Only.		
>>Rx Timing Deviation	М		INTEGER(0819 1)	According to mapping in TS 25.123 [24].	_	
>Round Trip Time				FDD Only.		
>>Round Trip Time	М		INTEGER(0327 67)	According to mapping in TS 25.133 [23].	-	
>Additional Measurement Thresholds						
>>Tutran-gps					YES	reject
Measurement Threshold Information					120	reject
>>>T <sub>UTRAN-GPS</sub> Measurement Threshold Information	М		9.2.1.59C		_	
>>SFN-SFN Measurement Threshold Information					YES	reject
>>>SFN-SFN Measurement Threshold Information	М		9.2.1.52B		_	
>>Load					YES	reject
>>>Load	M		INTEGER(0100 )	0 is the minimum indicated load, and 100 is the maximum indicated load.	_	
>>Transmitted Carrier Power					YES	reject
>>>Transmitted Carrier Power	М		INTEGER(0100)	According to mapping in TS 25.133 [23] and TS 25.123 [24].	-	
>>Received Total Wide Band Power					YES	reject
>>>Received Total Wide Band Power	M		INTEGER(0621 )	According to mapping in TS 25.133 [23] and TS 25.123 [24].	-	
>>UL Timeslot ISCP				TDD Only.	YES	reject
>>>UL Timeslot ISCP	М		INTEGER(0127 )	According to mapping in TS 25.123 [24].	-	· · ·
>>RT Load					YES	reject

>>>RT Load	М	INTEGER(0100		_	
>>NRT Load Information		)		YES	reject
>>>NRT Load Information	M	INTEGER(03)		_	
>>Rx Timing Deviation LCR			Applicable to 1.28Mcps TDD Only.	YES	reject
>>>Rx Timing Deviation LCR	M	INTEGER(0511 )	According to mapping in TS 25.123 [24].	_	
>>HS-SICH reception quality			Applicable to TDD Only.	YES	reject
>>>HS-SICH reception quality	М	INTEGER (020)	According to mapping in TS 25.123 [24].	-	
>>UpPTS interference			1.28Mcps TDD Only.	YES	reject
>>>UpPTS interference Value	М	INTEGER (0127,)	According to mapping in TS 25.123 [24].	-	
>>Rx Timing Deviation 768			Applicable to 7.68Mcps TDD Only.	YES	reject
>>>Rx Timing Deviation 768	M	INTEGER(0655 35)	According to mapping in TS 25.123 [24].	_	
>>Rx Timing Deviation 384 Extended			Applicable to 3.84Mcps TDD Only.	YES	reject
>>>Rx Timing Deviation 384 Extended	М	INTEGER(0327 67)	According to mapping in TS 25.123 [24].	-	
>>Extended Round Trip Time			FDD Only.	YES	reject
>>>Extended Round Trip Time Value	М	INTEGER (32767103041)	Continuation of intervals with step size as defined in TS 25.133 [23].	-	
>>T <sub>UTRAN-GANSS</sub> Measurement Threshold Information				YES	reject
>>>T <sub>UTRAN</sub> - <sub>GANSS</sub> Measurement Threshold Information	M	9.2.1.113		-	
>>UE transmission power headroom				YES	reject
>>>UE transmission power headroom	М	INTEGER (031)	According to mapping in TS 25.133 [23] and TS 25.123 [24].	-	-

#### 9.2.1.39A 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	Criticality	Assigned Criticality
Message structure		1 <maxnr OfLevels&gt;</maxnr 		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
maxNrOfLevels	Maximum no. of message levels to report. The value for
	maxNrOfLevels is 256.

# 9.2.1.40 Message Type

The Message Type uniquely identifies the message being sent.

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IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Procedure ID		1		
Procedure ID >Procedure Code	M		INTEGER (0255)	<ul> <li>"0" = Common Transport Channel Resources Initialisation.</li> <li>"1" = Common Transport Channel Resources Release.</li> <li>"2" = Compressed Mode Command.</li> <li>"3" = Downlink Power Control.</li> <li>"4" = Downlink Power Timeslot Control.</li> <li>"5" = Downlink Signalling Transfer.</li> <li>"6" = Error Indication.</li> <li>"7" = Dedicated Measurement Failure.</li> <li>"8" = Dedicated Measurement Failure.</li> <li>"8" = Dedicated Measurement Reporting.</li> <li>"10" = Dedicated Measurement Reconfiguration.</li> <li>"14" = Radio Link Addition.</li> <li>"15" = Radio Link Preemption.</li> <li>"16" = Radio Link Failure.</li> <li>"17" = Radio Link Preemption.</li> <li>"18" = Radio Link Restoration.</li> <li>"19" = Radio Link Restoration.</li> <li>"19" = Radio Link Restoration.</li> <li>"20" = Relocation Commit.</li> <li>"20" = Relocation Commit.</li> <li>"21" = Synchronised Radio Link Reconfiguration Cancellation.</li> <li>"22" = Synchronised Radio Link Reconfiguration Commit.</li> <li>"23" = Synchronised Radio Link Reconfiguration.</li> <li>"24" = UnSynchronised Radio Link Reconfiguration.</li> <li>"25" = Uplink Signalling Transfer.</li> <li>"26" = Common Measurement Failure.</li> <li>"27" = Common Measurement Failure.</li> <li>"30" = Information Exchange Initiation.</li> <li>"32" = Information Exchange Initiation.</li> <li>"33" = Information Exchange Initiation.</li> <li>"35" = Reset.</li> <li>"36" = Radio Link Activation.</li> <li>"37" = GERAN Uplink Sign</li></ul>
				"53" = MBSFN MCCH Information.

			<ul> <li>"54" = Secondary UL Frequency Reporting.</li> <li>"55" = Secondary UL Frequency Update.</li> <li>"56" = Information Transfer Control.</li> <li>"60" = Enhanced Relocation Resource Allocation.</li> <li>"61" = Enhanced Relocation Resource Release.</li> </ul>
>Ddmode	М	ENUMERATED(FDD, TDD, Common,)	Common = common to FDD and TDD.
Type of Message	М	ENUMERATED(Initiati ng Message, Successful Outcome, Unsuccessful Outcome, Outcome)	

#### 9.2.1.41 Multiple URAs Indicator

The Multiple URAs Indicator indicates whether the accessed cell has multiple URAs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiple URAs Indicator			ENUMERAT	
			ED(Multiple	
			URA s exist,	
			Single URA	
			Exists)	

#### 9.2.1.41a NACC Related Data

The NACC related data IE provides NACC related information for the indicated GSM cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE GERAN System Info Type	Μ			
>S/				
>>SI	М		9.2.1.30Fc	GERAN system information SI3, SI13, SI1 (TS 44.060 [47]).
>PSI				
>>PSI	М		9.2.1.30Fc	GERAN system information PSI1, PSI2, PSI4 (TS 44.060 [47]).

#### 9.2.1.41A Neighbouring UMTS Cell Information

The *Neighbouring UMTS Cell Information* IE provides information for UMTS Cells that are neighbouring cells to a cell in the DRNC. The neighbouring cell information is provided for each RNC (including the DRNC) that has cells that are neighbouring cells to the cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring UMTS Cell Information		1 <maxnro fNeighbouri ngRNCs&gt;</maxnro 			EACH	ignore
>RNC-ID	M		9.2.1.50	If the Extended RNC-ID IE is included in the Neighbourin g UMTS Cell Information IE, the RNC- ID IE shall be ignored.	_	
>CN PS Domain Identifier	0		9.2.1.12		_	
>CN CS Domain Identifier	0		9.2.1.11		_	
>Neighbouring FDD Cell Information	0		9.2.1.41B		_	
>Neighbouring TDD Cell Information	0		9.2.1.41D		-	
>Neighbouring TDD Cell Information LCR	0		9.2.1.72		YES	ignore
>Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

Range bound	Explanation
maxNrOfNeighbouringRNCs	Maximum number of neighbouring RNCs.

# 9.2.1.41B Neighbouring FDD Cell Information

The *Neighbouring FDD Cell Information* IE provides information for FDD cells that are neighbouring cells to a cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring FDD Cell Information		1 <max NrOfFD DNeighb oursPer RNC&gt;</max 			_	j
>C-ID	М		9.2.1.6		-	
>UL UARFCN	М		UARFCN 9.2.1.66	Corresponds to Nu in TS 25.104 [6].	_	
>DL UARFCN	М		UARFCN 9.2.1.66	Corresponds to Nd in TS 25.104 [6].	_	
>Frame Offset	0		9.2.1.30		_	
>Primary Scrambling Code	М		9.2.1.45		_	
>Primary CPICH Power	0		9.2.1.44		_	
>Cell Individual Offset	0		9.2.1.7		-	
>Tx Diversity Indicator	М		9.2.2.50			
>STTD Support Indicator	0		9.2.2.45		-	
>Closed Loop Mode1 Support Indicator	0		9.2.2.2		-	
>Not Used	0		NULL		-	
>Restriction State Indicator	0		9.2.1.48C		YES	ignore
>DPC Mode Change Support Indicator	0		9.2.2.56		YES	ignore
>Coverage Indicator	0		9.2.1.12G		YES	ignore
>Antenna Co-location Indicator	0		9.2.1.2C		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Cell Capability Container FDD	0		9.2.2.D		YES	ignore
>SNA Information	0		9.2.1.52Ca		YES	ignore
>Frequency Band Indicator	0		9.2.2.59		YES	ignore
>Max UE DTX Cycle	C-CPC- DTX- DRXCapab le		9.2.2.87		YES	ignore
>Multiple PLMN List	0		9.2.1.117		YES	ignore
>Secondary Serving Cell List	C-MC- Capable		9.2.2.101		YES	ignore
>Dual Band Secondary Serving Cell List	C-DB- Capable		Secondary Serving Cell List 9.2.2.101		YES	ignore
>Cell Capability Container Extension FDD	0		9.2.2.123		YES	ignore
>Cell List Validity Indicator	0		ENUMERAT ED (Ignore Secondary Serving Cell List, Ignore Dual Band Secondary Serving Cell List, Ignore Both)		YES	ignore

Range bound	Explanation		
maxNrOfFDDNeighboursPerRNC	Maximum number of neighbouring FDD cell for one cell.		

Condition	Explanation
CPC-DTX-DRXCapable	The IE shall be present if the the fifteenth bit Continuous Packet
	Connectivity DTX-DRX Support Indicator in the Cell Capability Container
	FDD IE is set to the value "1".
MC-Capable	The IE shall be present if the the Multi Cell Support Indicator in the Cell
	Capability Container FDD IE is set to the value "1".
DB-Capable	The IE shall be present if the the Dual Band Support Indicator in the Cell
	Capability Container FDD IE is set to the value "1".

# 9.2.1.41C Neighbouring GSM Cell Information

The *Neighbouring GSM Cell Information* IE provides information for all GSM Cells that are a neighbouring cell to a cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring GSM Cell Information		1 <max NrOfGS MNeighb oursPer RNC&gt;</max 			GLOBAL	ignore
>CGI		1		Cell Global Identity as defined in TS 23.003 [1].	_	
>>LAI		1			_	
>>>PLMN Identity	Μ		OCTET STRING (3)	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler.</li> <li>bit 4 to 1 of octet n encoding digit 2n-1.</li> <li>bit 8 to 5 of octet n encoding digit 2n.</li> <li>The PLMN Identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>		
>>>LAC	Μ		OCTET STRING (2)	0000 and FFFE not allowed.	-	
>>Cl	М		OCTET STRING (2)		-	
>Cell Individual Offset	0	1	9.2.1.7	The Cell Individual Offset to be used for Ues using DCHs. If the Extended GSM Cell Individual Offset IE is present, the Cell Individual Offset IE shall be set to a) –10dB if the Extended GSM Cell Individual Offset IE is < -10dB and b) 10dB if the Extended GSM Cell Individual Offset IE is > 10dB. Base Station Identity	_	
		1		Code as defined in TS 23.003 [1].	_	
>>NCC	М		BIT STRING(3)	Network Colour Code.	-	
>>BCC	М		BIT STRING(3)	Base Station Colour Code.	-	
>Band Indicator	M		ENUMERAT ED(DCS 1800 band, PCS 1900 band,)	Indicates whether or not the BCCH ARFCN belongs to the 1800 band or 1900 band of GSM frequencies.	_	
>BCCH ARFCN	M		INTEGER(0. .1023)	BCCH Frequency as defined in TS 45.005 [69].	-	
>Coverage Indicator	0		9.2.1.12G		YES	ignore

>Antenna Co-location Indicator	0	9.2.1.2C		YES	ignore
>HCS Prio	0	9.2.1.30N		YES	ignore
> SNA Information	0	9.2.1.52Ca		YES	ignore
>GERAN Cell Capability	0	9.2.1.30Fa		YES	ignore
>GERAN Classmark	0	9.2.1.30Fb		YES	ignore
>Extended GSM Cell Individual Offset	0	9.2.1.26Bb	The Extended GSM Cell Individual Offset to be used for Ues using DCHs, for values that exceed the range of the <i>Cell</i> <i>Individual Offset</i> IE.	YES	ignore

Range bound	Explanation
maxNrOfGSMNeighboursPerRNC	Maximum number of neighbouring GSM cells for one cell.

# 9.2.1.41D Neighbouring TDD Cell Information

The *Neighbouring TDD Cell Information* IE provides information for 3.84Mcps TDD or 7.68Mcps TDD cells that are neighbouring cells to a cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring TDD Cell Information		1 <maxnr OfTDDNeig hboursPerR NC&gt;</maxnr 			_	
>C-ID	Μ		9.2.1.6		_	
>UARFCN	М		9.2.1.66	Corresponds to Nt in TS 25.105 [7].	_	
>Frame Offset	0		9.2.1.30		-	
>Cell Parameter ID	Μ		9.2.1.8		-	
>Sync Case	Μ		9.2.1.54		-	
>Time Slot For SCH	C-Case1		Time Slot 9.2.1.56		-	
>SCH Time Slot	C-Case2		9.2.1.51		_	
>SCTD Indicator	Μ		9.2.1.78		_	
>Cell Individual Offset	0		9.2.1.7		-	
>DPCH Constant Value	0		9.2.1.23		-	
>PCCPCH Power	0		9.2.1.43		-	
>Restriction State Indicator	0		9.2.1.48C		YES	ignore
>Coverage Indicator	0		9.2.1.12G		YES	ignore
>Antenna Co-location Indicator	0		9.2.1.2C		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Cell Capability Container TDD	0		9.2.3.1a		YES	ignore
>Cell Capability Container 7.68Mcps TDD	0		9.2.3.31		YES	ignore
> SNA Information	0		9.2.1.52Ca		YES	ignore
>Multiple PLMN List	0		9.2.1.117		YES	ignore

Condition	Explanation
Case1	The IE shall be present if the Sync Case IE is set to "Case1".
Case2	The IE shall be present if the Sync Case IE is set to "Case2".

Range bound	Explanation
maxNrOfTDDNeighboursPerRNC	Maximum number of neighbouring 3.84Mcps TDD or 7.68Mcps TDD
	cell for one cell.

## 9.2.1.41Dd Neighbouring TDD Cell Measurement Information LCR

This IE provides information on the 1.28Mcps 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 LCR* IE and *Midamble shift LCR* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UTRAN Cell Identifier	М		9.2.1.71	
UARFCN	М		9.2.1.66	Corresponds to Nt TS 25.105 [7].
Cell Parameter ID	Μ		9.2.1.8	
Time Slot LCR	0		9.2.3.12a	
Midamble shift LCR	0		9.2.3.4C	

# 9.2.1.41De Neighbouring E-UTRA Cell Information

The *Neighbouring E-UTRA Cell Information* IE provides information for all E-UTRA Cells that are a neighbouring cell to a cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring E-UTRA Cell Information		1 <max NrOfEU TRANeig hboursP erRNC &gt;</max 			_	
>ECGI		1		EUTRAN Cell Global Identity as defined in TS 36.401 [61].	_	
>>PLMN Identity	M		OCTET STRING (3)	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler</li> <li>bit 4 to 1 of octet n encoding digit 2n-1</li> <li>bit 8 to 5 of octet n encoding digit 2n</li> <li>The PLMN Identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>	_	
>>E-UTRAN Cell Identifier	M		BIT STRING (28)	The leftmost bits of the <i>E-UTRAN Cell</i> <i>Identifier</i> IE value correspond to the value of the eNB ID.	_	
>CHOICE EARFCN Information	М				-	
>>FDD						
>>>EARFCN-FDD		1				
>>>UL EARFCN	М		9.2.1.41Df EARFCN	Corresponds to NuL in TS 36.104 [62].	-	
>>>DL EARFCN	М		9.2.1.41Df EARFCN	Corresponds to NdL in TS 36.104 [62].	-	
>>TDD						
>>> EARFCN	М		9.2.1.41Df EARFCN	Corresponds to NdL in TS 36.104 [62].	-	

Range bound	Explanation
maxNrOfEUTRANeighboursPerRNC	Maximum number of neighbouring LTE cells for one cell.

# 9.2.1.41Df EARFCN

The EARFCN (E-UTRA Absolute Radio Frequency Channel Number) defines the carrier.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
EARFCN			INTEGER	Defined in TS 36.104 [62].
			(0maxEAR	
			FCN)	

# 9.2.1.41E Paging Cause

Cause for a CN originated page.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Paging Cause			ENUMERAT	See in TS 25.331 [16].
			ED(	
			Terminating	
			Conversatio	
			nal Call,	
			Terminating	
			Streaming	
			Call,	
			Terminating	
			Interactive	
			Call,	
			Terminating	
			Background	
			Call,	
			Terminating	
			Low Priority	
			Signalling,	
			, Terminating	
			High Priority	
			Signalling,	
			Terminating	
			- cause	
			unknown	

# 9.2.1.41F Paging Record Type

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging Record Type			ENUMERAT ED(IMSI (GSM-MAP), TMSI (GSM- MAP), P- TMSI (GSM- MAP), IMSI (DS-41), TMSI (DS- 41),)	See TS 25.331 [16].

# 9.2.1.41Fa Partial Reporting Indicator

This IE indicates if DRNS may report partially successful measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Partial Reporting Indicator			ENUMERAT ED(partial reporting allowed)	

## 9.2.1.41G 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
UTRAN Cell Identifier	М		9.2.1.71	
UARFCN	М		9.2.1.66	Corresponds to Nd TS 25.104 [6].
Primary Scrambling Code	М		9.2.1.45	

## 9.2.1.41H 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
UTRAN Cell Identifier	М		9.2.1.71	
UARFCN	Μ		9.2.1.66	Corresponds to Nt TS 25.105 [7].
Cell Parameter ID	Μ		9.2.1.8	
Time slot	0		9.2.1.56	
Midamble Shift And Burst Type	0		9.2.3.4	

## 9.2.1.411 NRT Load Information Value

The *NRT Load Information* IE indicates the load situation on the cell for the Non Real-Time traffic. Non Real Time traffic corresponds to the Interactive and Background traffic classes.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink NRT Load Information Value	Μ		INTEGER(0. .3)	Mapping of the status: 0: low: The Uplink NRT load is low. 1: medium: The Uplink NRT load is medium. 2: high: Uplink NRT load is high. Probability to admit a new user is low. 3: overloaded: Uplink NRT overload. The probability to admit a new user is low, packets are discarded and the source is recommended to reduce the data flow.
Downlink NRT Load Information Value	Μ		INTEGER(0. .3)	Mapping of the status: 0: low: The Downlink NRT load is low. 1: medium: The Downlink NRT load is medium. 2: high: Downlink NRT load is high. Probability to admit a new user is low. 3: overloaded: Downlink NRT overload. The probability to admit a new user is low, packets are discarded and the source is recommended to reduce the data flow.

# 9.2.1.42 Payload CRC Present 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			ENUMERAT	
Indicator			ED(CRC	
			Included,	
			CRC not	
			included)	

#### 9.2.1.43 PCCPCH Power

Primary CCPCH power is the power that shall be used for reference power value in a TDD cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CCPCH, the PCCPCH Power is the linear sum of the power that is used for transmitting the PCCPCH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCCPCH Power			NTEGER (- 150400,)	Unit dBm Range $-15.0$ to 40.0 dBm, Step size 0.1 dB. -15.0 shall indicate P $\leq$ -15dBm +40.0 shall indicate P $\geq$ 40dBm.

#### 9.2.1.44 Primary CPICH Power

Primary CPICH power is the power that is used for transmitting the Primary 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. Step 0.1 dB.

## 9.2.1.45 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(0 511)	

## 9.2.1.45A Priority Queue ID

The *Priority Queue ID* IE provides the identity of the Priority Queue. The Priority Queue ID is unique across all MACd flows that are currently allocated for one UE Context or across all Common MAC flows within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Queue ID			INTEGER (07)	

## 9.2.1.45B Process Memory Size

The *Process Memory Size* IE is the size of an HARQ process in the DRNS expressed in bits. It provides the maximum number of soft channel bits in the virtual IR buffer (TS 25.212 [9]) or (TS 25.222 [46]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
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,)	

## 9.2.1.46 Puncture Limit

The maximum amount of puncturing for a transport channel in rate matching.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Puncture Limit			INTEGER	0: 40%
			(015)	1: 44 %
				 14: 96% 15: 100% (no puncturing) [FDD – Value 0 is not applicable for E-DPCH.].

#### 9.2.1.46A 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			ENUMERAT	
			ED(selected,	
			non-	
			selected)	

#### 9.2.1.47 RANAP Relocation Information

This parameter is transparent to the RNSAP. The parameter contains information for the Relocation procedure as defined in TS 25.413 [2].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RANAP Relocation Information			BIT STRING	The content is defined in TS 25.413 [2].

# 9.2.1.48 Report Characteristics

The Report Characteristics, defines 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			0.0.4.40-	The manifest in		
>>Report Periodicity	М		9.2.1.48a	The periodicity with which the DRNS shall send measurement reports.	_	
>Event A						
>>Measurement Threshold	Μ		9.2.1.39	The threshold for which the DRNS shall trigger a measurement report.	-	
>>Measurement Hysteresis Time	0		9.2.1.36A		-	
>Event B >Measurement	M		9.2.1.39	The threshold for		
Threshold			9.2.1.09	which the DRNS shall trigger a measurement report.		
>>Measurement Hysteresis Time	0		9.2.1.36A		-	
>Event C >>Measurement	M		9.2.1.38			
Increase/Decrease Threshold			9.2.1.30		_	
>>Measurement Change Time	М		9.2.1.35B	The time within which the measurement entity shall rise, in order to trigger a measurement report.	F	
>Event D						
>>Measurement Increase/Decrease Threshold	М		9.2.1.38		-	
>>Measurement Change Time	М		9.2.1.35B	The time within which the measurement entity shall fall, in order to trigger a measurement report.	-	
>Event E						
>Measurement Threshold 1	М		Measureme nt Threshold 9.2.1.39		_	
>>Measurement Threshold 2	0		Measureme nt Threshold 9.2.1.39		-	
>>Measurement Hysteresis Time	0		9.2.1.36A	The hysteresis time in ms.	_	
>>Report Periodicity	0		9.2.1.48a	The periodicity with which the DRNS shall send measurement reports.	_	
>Event F						
>>Measurement Threshold 1	М		Measureme nt Threshold 9.2.1.39		-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>Measurement Threshold 2	0		Measureme nt Threshold 9.2.1.39		-	
>Measurement Hysteresis Time	0		9.2.1.36A	The hysteresis time in ms.		
>>Report Periodicity	0		9.2.1.48a	The periodicity with which the DRNS shall send measurement reports.	Ι	
>Additional Report Characteristics						
>>On Modification						
>>>On Modification		1			YES	reject
>>>>Measurem ent Threshold	М		9.2.1.39			
>>Event H						
>>>Event H		1			YES	reject
>>>Measurem ent Threshold 1	Μ		Measureme nt Threshold 9.2.1.39		_	
>>>Measurem ent Threshold 2	0		Measureme nt Threshold 9.2.1.39		-	
>>>>Measurem ent Hysteresis Time	0		9.2.1.36A	The hysteresis time in ms.	1	
>>>Report Periodicity	0		9.2.1.48a	The periodicity with which the DRNS shall send measurement reports.	_	
>>>Measurem ent Fluctuation Range	0	0-100			-	

#### 9.2.1.48a 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 Scale	М			
>millisecond				
>>Report Periodicity Value	М		INTEGER (16000,)	Unit: ms. Range: 1060000 ms. Step: 10 ms.
>minute				
>>Report Periodicity Value	М		INTEGER (160,)	Unit: min. Range: 160 min. Step: 1 min.

## 9.2.1.48A Requested Data Value

The Requested Data Value contains the relevant data concerned the ongoing information exchange. *Requested Data Value* IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
UTRAN Access Point Position	0		9.2.1.75		-	
with Altitude IPDL Parameters	0		9.2.1.31F			
	0		9.2.1.31F 9.2.1.19B		_	
DGPS Corrections GPS Navigation Model and	0		9.2.1.19D 9.2.1.30l		_	
Time Recovery	0		9.2.1.301		—	
GPS lonospheric Model	0		9.2.1.30H		_	
GPS UTC Model	0		9.2.1.30L			
GPS Almanac	0		9.2.1.30L 9.2.1.30G		—	
	0					
GPS Real-Time Integrity GPS RX Pos	0		9.2.1.30J			
SFN-SFN Measurement	0		9.2.1.30K		—	
Reference Point Position	0		9.2.1.74		_	
	0		0.0.1.50		VES	ignoro
Cell Capacity Class Value	0		9.2.1.5C		YES	ignore
NACC Related Data MBMS Bearer Service Full	0		9.2.1.41a 9.2.1.84		YES	ignore
Address	0				YES	ignore
Inter-frequency Cell Information	0		9.2.1.31G		YES	ignore
GANSS Common Data		01			YES	ignore
>GANSS Ionospheric Model	0	01	9.2.1.105		-	ignore
>GANSS RX Pos	0		9.2.1.109			
>GANSS Additional	0		9.2.1.105		YES	Ignore
Ionospheric Model	0		9.2.1.105a		TES	ignore
>GANSS Earth Orientation	0		9.2.1.122a		YES	Ignore
Parameters	0		9.2.1.122a		TES	ignore
GANSS Generic Data		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></maxno<>			GLOBAL	ignore
GANSS Generic Data		GANSS>			GLUBAL	ignore
>GANSS ID	0	041002	9.2.1.119		_	
>DGANSS Corrections	0		9.2.1.102		_	
>GANSS Navigation Model	0		9.2.1.120			
And Time Recovery	0		3.2.1.120			
>GANSS Time Model	0		9.2.1.110		_	
>GANSS UTC Model	0		9.2.1.111			
>GANSS Almanac	0		9.2.1.103			
>GANSS Real Time Integrity	0		9.2.1.108			
>GANSS Data Bit	0		9.2.1.118		_	
Assistance	0		9.2.1.110		—	
>GANSS Additional Time	0		9.2.1.110a		YES	Ignore
Models						-
>GANSS Additional Navigation Models And Time	0		9.2.1.120a		YES	Ignore
Recovery						
>GANSS Additional UTC	0		9.2.1.111a		YES	Ignore
Models	0		9.2.1.111a		TES	ignore
>GANSS Auxiliary	0		0.0.1.1000		YES	Ignoro
Information	0		9.2.1.122c		TES	Ignore
>SBAS ID	C-GANSS-		9.2.1.122b		YES	Ignore
	ID		J.Z. I. IZZU		TES	ignore
Counting Information	0		9.2.2.94	FDD only.	YES	ignore
Transmission Mode	0		9.2.2.94	FDD only.	YES	ignore
Information			5.2.2.35	, DD Only.	120	ignore
MBMS Neighbouring Cell	0		9.2.2.96	FDD only.	YES	ignore
Information			5.2.2.30	. DD Only.	120	ignore
			0 2 2 07	FDD only.	YES	ignore
	$\Box$					
RLC Sequence Number	0		9.2.2.97	FDD Only.		
	0 0 0		9.2.1.149 9.2.1.156	FDD only	YES	ignore 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.

### 9.2.1.48B 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	Criticality	Assigned Criticality
CHOICE Information	М				-	
Availability Indicator						
>Information Available					-	
>>Requested Data	М		9.2.1.48A		-	
Value						
>Information not			NULL		_	
Available						

## 9.2.1.48C Restriction State Indicator

The Restriction state indicator is the identifier indicates whether the cell is "Cell Reserved for Operator Use" or not. It is provided by DRNS and reported to SRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Restriction state indicator				
			ED(Cell Not Reserved for	
			Operator	
			Use, Cell	
			Reserved for	
			Operator	
			Use,)	

### 9.2.1.48D 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			ENUMERAT	
			ED (	
			RLC-AM,	
			RLC-UM,)	

#### 9.2.1.49 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)	

# 9.2.1.49A RL Specific DCH Information

The *RL Specific DCH Information* IE provides RL Specific DCH Information for DCHs. In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur, 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 <maxnr OfDCHs&gt;</maxnr 			-	
>DCH ID	M		9.2.1.16		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishme nt with ALCAP.	_	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishme nt with ALCAP.	_	
>Transport Bearer Not Requested Indicator	0		9.2.2.4S	FDD Only.	YES	Ignore

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

## 9.2.1.50 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(0. .4095)	

#### 9.2.1.50a 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(4	Note: Application of the
			09665535)	Extended RNC-ID IE to very
				large networks is FFS.

#### 9.2.1.50A SAT ID

The SAT ID indicates the identity of the satellite.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SAT ID			INTEGER(0. .63)	Identifies the satellite and is equal to (SV ID No – 1) where SV ID No is defined in ICD-GPS- 200 [30].

# 9.2.1.50B RT Load Value

The *RT Load Value* IE indicates in percents the ratio of the load generated by Real Time traffic, relative to the measured Load Value. Real Time traffic corresponds to the Conversational and Streaming traffic classes.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink RT Load Value	М		INTEGER(0. .100)	
Downlink RT Load Value	М		INTEGER(0. .100)	

## 9.2.1.51 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 is 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(0. .6)	

## 9.2.1.51A Scheduling Priority Indicator

Indicates the relative priority of the FACH, [TDD – DSCH, USCH,] HS-DSCH [FDD – or E-DCH] data frame. Used by the DRNC when scheduling FACH, [TDD – DSCH, USCH,] HS-DSCH [FDD – or E-DCH] traffic.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scheduling Priority Indicator			INTEGER(0. .15)	Relative priority of the FACH, [TDD – DSCH, USCH,] HS- DSCH [FDD – or E-DCH] data frame: 0=Lowest Priority.  15=Highest Priority.

# 9.2.1.52 Service Area Identifier (SAI)

This information element is used to identify an area consisting of one or more cells belonging to the same Location Area. Such an area is called a Service Area and can be used for indicating the location of a UE to the CN. For this protocol, only a Service Area that is defined to be applicable to the PS and CS domains shall be used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLMN Identity	М		OCTET STRING (3)	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler</li> <li>bit 4 to 1 of octet n encoding digit 2n-1</li> <li>bit 8 to 5 of octet n encoding digit 2n</li> <li>The PLMN Identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>
LAC	М		OCTET STRING (2)	0000 and FFFE not allowed
SAC	М		OCTET STRING (2)	

#### 9.2.1.52A SFN

System Frame Number of the cell, see TS 25.402 [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN			INTEGER(0. .4095)	

# 9.2.1.52B 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(1. .256)	Change of SFN-SFN value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted SFN-SFN Deviation Limit	0		INTEGER(1. .256)	Deviation the Predicted SFN- SFN from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

### 9.2.1.52C SFN-SFN Measurement Value Information

The *SFN-SFN Measurement Value Information* IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements as well as other related information.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information		1 <maxnrofmeasn Cell&gt;</maxnrofmeasn 		
>UTRAN Cell Identifier	М		9.2.1.71	
>SFN-SFN Value	М		9.2.1.77	
>SFN-SFN Quality	0		INTEGER(0. .255)	Indicates the standard deviation (std) of the SFN-SFN otd (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(- 100100)	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(0. .100)	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		9.2.1.76	
Unsuccessful Neighbouring cell SFN- SFN Observed Time Difference Measurement Information		0 <maxnrofmeasn Cell-1&gt;</maxnrofmeasn 		
>UTRAN Cell Identifier	М		9.2.1.71	

Range bound	Explanation
maxNrOfMeasNCell	Maximum number of neighbouring cells on which
	measurements can be performed.

# 9.2.1.52Ca Shared Network Area (SNA) Information

This information element contains a list of Shared Network Areas, identified by the Shared Network Area Code (SNAC, see TS 23.003 [1]) which a certain cell belongs to. For a broader description of the SNA access control see TS 25.401 [40].

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
PLMN Identity	M		OCTET STRING (3)	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler</li> <li>bit 4 to 1 of octet n encoding digit 2n-1</li> <li>bit 8 to 5 of octet n encoding digit 2n</li> <li>The PLMN Identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>
List of SNAs		0 <maxnrofsna s&gt;</maxnrofsna 		
> SNAC	М		INTEGER (0 65535)	

Range bound	Explanation
maxNrOfSNAs	Maximum number of SNAs one cell can be part of.

#### 9.2.1.52D 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)	

#### 9.2.1.53 S-RNTI

The S-RNTI identifies the UE in the SRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-RNTI			INTEGER(0. .2^20 –1)	

#### 9.2.1.53a S-RNTI Group

The S-RNTI Group identifies a group of Ues in the SRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-RNTI	М		9.2.1.53	
S-RNTI bit mask index	M		Enumerated( b1, b2,b19,)	

The S-RNTI group is identified by all S-RNTI values whose bits starting from the most significant bit down to, and including, the bit indicated by S-RNTI bit mask index, are equal to the corresponding bits of the S-RNTI in this IE.

The bits of the S-RNTI in this IE that are less significant than the bit position indicated by the S-RNTI bit mask index shall be ignored.

#### 9.2.1.54 Sync Case

The SCH and PCCPCH in a TDD cell are mapped on one or two downlink slots per frame. There are two cases of Sync Case 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 DRNC to SRNC used for 1.28Mcps TDD, the DRNC shall indicate Sync Case 1 and the SRNC shall ignore it.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Case			INTEGER (12)	

#### 9.2.1.54A T1

The T1 IE is used as described in TS 25.321 [41] subclause 11.6.2.3.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
T1			ENUMERAT	Unit: ms
			ED (10, 20,	Node B may use this value to
			30, 40, 50,	stop the re-transmission of
			60, 70, 80,	the corresponding MAC-hs
			90, 100, 120,	PDU.
			140, 160,	
			200, 300,	
			400,)	

#### 9.2.1.55 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 TS 25.221 [12].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Presence			ENUMERATE	
			D(Present,	
			not present)	

#### 9.2.1.56 Time Slot

The Time Slot represents the time interval assigned to a Physical Channel referred to the start of a Radio Frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot			INTEGER	
			(014)	

# 9.2.1.56A 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 (IETF RFC 2474 [44]) at the DRNS side.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE TNL QoS type	М			
>DS Field				
>>DS field	Μ		BIT STRING (8)	DS field as defined in IETF RFC 2474 [44]. Typically used when the DRNS and its SRNC are in the same DS domain as defined in IETF RFC 2475 [45].
>Generic Traffic				
Category				
>>Generic Traffic Category	М		BIT STRING (8)	

## 9.2.1.57 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: msec.

#### 9.2.1.58 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: msec.

#### 9.2.1.58a Trace Depth

The Trace Depth IE is Trace Configuration Parameter what should be traced by the DRNC on the indicated interfaces.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Trace Depth			ENUMERATED ( Minimum, Medium, Maximum,)	Meaning of this parameter is described in TS 32.422 [49].

## 9.2.1.58b Trace Recording Session Reference

The *Trace Recording Session Reference* IE provides a Trace Recording Session Reference allocated by the triggering entity.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Trace Recording Session Reference			INTEGER (065535)	

#### 9.2.1.58c Trace Reference

The Trace Reference IE provides a Trace Reference allocated by the triggering entity.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Trace Reference			OCTET STRING (SIZE(23))	

#### 9.2.1.58A Traffic Class

This IE indicates the type of application the Radio Bearer is optimised for.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Traffic Class			ENUMERATED (conversational, streaming, interactive, background, )	

#### 9.2.1.59 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 procedures addressed to a specific UE Context, the Transaction ID shall uniquely identify a procedure among all ongoing parallel procedures for the same UE using the same procedure code, and initiated by the same protocol peer.

For procedures not addressed to a specific UE Context, the Transaction ID shall uniquely identify a procedure among all ongoing parallel procedures using the same procedure code, and initiated by the same protocol peer.

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	М		INTEGER (0127)	
>Long				
>>Transaction ID Value	М		INTEGER (032767)	

## 9.2.1.59A Transmitted Carrier Power

The *Transmitted Carrier Power* IE contains the Transmitted Carrier Power in a cell, as defined in TS 25.215 [11] & TS 25.225 [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmitted Carrier Power			INTEGER(0. .100)	According to mapping in TS 25.133 [23] and TS 25.123 [24].

## 9.2.1.59B T<sub>UTRAN-GPS</sub> Accuracy Class

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T <sub>UTRAN-GPS</sub> Accuracy Class			ENUMERAT ED(Accuracy Class A, Accuracy Class B, Accuracy	More information about Measurement Accuracy Class is included in TS 25.133 [23].
			Class C,)	

# 9.2.1.59C T<sub>UTRAN-GPS</sub> Measurement Threshold Information

The T<sub>UTRAN-GPS</sub> 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(1. .256)	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(1. .256)	Deviation of the Predicted $T_{UTRAN-GPS}$ from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

## 9.2.1.59D 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 >MS	M	1	INTEGER	Indicates the UTRAN GPS Timing of Cell Frames for UE Positioning. According to mapping in TS 25.133 [23] and TS 25.123 [24]; significant values range from 0 to 37158911999999. Most Significant Part.
2100	101		(016383)	-
>LS	М		INTEGER (04294967 295)	Least Significant Part.
Tutran-gps Quality	0		INTEGER(0. .255)	Indicates the standard deviation (std) of the T <sub>UTRAN-GPS</sub> measurements in 1/16 chip. T <sub>UTRAN-GPS</sub> 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	Μ		INTEGER(- 5050)	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(0. .50)	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.

# 9.2.1.60 Transport Bearer ID

The Transport Bearer ID uniquely identifies an Iur transport bearer.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer ID			INTEGER(0. .4095)	

## 9.2.1.61 Transport Bearer Request Indicator

Indicates whether a new Iur transport bearer needs to be established for carrying the corresponding data stream(s), or whether an existing transport bearer will be used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Request			ENUMERAT	
Indicator			ED(Bearer	
			Requested,	
			Bearer not	
			Requested,	
			)	

## 9.2.1.62 Transport Layer Address

In case of transport bearer establishment with ALCAP (TS 25.426 [3] TS 25.424 [35]), this IE contains the address to be used for Transport Network Control Plane signalling to establish the transport bearer according to TS 25.426 [3], TS 25.424 [35].

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 TS 25.426 [3].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Layer Address			BIT	
			STRING(11	
			60,)	

## 9.2.1.63 Transport Format Combination Set (TFCS)

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 to DL Transport Channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE TFCS Values	М			
>Always Used				This choice is always made.
>>TFCS		1 <maxnroftfcs &gt;</maxnroftfcs 		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	М		9.2.1.14A	
>>>CHOICE Gain	C-			
Factors	PhysChan			
>>>Signalled Gain Factors				
>>>>Gain Factor β <sub>C</sub>	Μ		INTEGER(0 15)	$ \begin{array}{l} [FDD-For~UL~DPCCH~or\\ control~part~of~PRACH~TS\\ 25.213~[21].]\\ [TDD-\beta~for~UL~DPCH\\ mapping~in~accordance~to~TS\\ 25.223~[13].] \end{array} $
>>>>Gain Factor β <sub>D</sub>	Μ		INTEGER(0 15)	[FDD – For UL DPDCH or data part of PRACH TS 25.213 [21].] [TDD – Should be set to 0 by the sender, and shall be ignored by the receiver.]
>>>>Reference TFC nr	0		INTEGER(0 15)	If this TFC is a reference TFC, this IE indicates the reference number.
>>>Computed Gain Factors				
>>>>Reference TFC nr	М		INTEGER(0 15)	Indicates the reference TFC to be used to calculate the gain factors for this TFC.
>Not Used			NULL	This choice shall never be made by the SRNC and the DRNC shall consider the procedure as failed if it is received.

Condition	Explanation
PhysChan	The choice shall be present if the TFCS concerns a UL DPCH
	[FDD – or PRACH channel].

Range bound	Explanation
maxNrOfTFCs	The maximum number of Transport Format Combinations.

# 9.2.1.64 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 <maxnroftfs></maxnroftfs>		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number of Transport Blocks	М		INTEGER (0512)	
>Transport Block Size	C – Blocks		INTEGER (05000)	Unit: Bits.
>CHOICE Mode	М			
>>TDD				
>>>Transmission Time Interval Information	C- TTIdynamic	1 <maxtti- Count&gt;</maxtti- 		
>>>>Transmission Time Interval	Μ		ENUMERAT ED(10, 20, 40, 80,)	Unit: msec.
Semi-static Transport Format Information		1		
>Transmission Time Interval	M		ENUMERAT ED (10, 20, 40, 80, dynamic, )	Unit: msec. Value "dynamic" for 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		ENUMERAT ED (No codingTDD, Convolutiona I, Turbo,)	[FDD – The value "No codingTDD" shall be treated as logical error if received].
>Coding Rate	C – Coding		ENUMERAT ED (1/2, 1/3,)	
>Rate Matching Attribute	M		INTEGER (1maxRate Matching)	
>CRC size	М		ENUMERAT ED (0, 8, 12, 16, 24,)	
>CHOICE Mode	М			
>>TDD				
>>>2 <sup>nd</sup> Interleaving Mode	М		ENUMERAT ED(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 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
maxNrOfTFs	The maximum number of different transport formats that can be
	included in the Transport format set for one transport channel.
maxRateMatching	The maximum number that could be set as rate matching attribute
	for a transport channel.
maxTTI-Count	The amount of different TTI that are possible for that transport
	format is.

#### 9.2.1.65 TrCH Source Statistics Descriptor

Defines the statistics of the data transmitted in the transport channel. This information may be used in reserving resources in the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TrCH Source Statistics Descriptor			ENUMERAT ED(Speech, RRC, Unknown, )	"Speech" = Statistics of the data corresponds to speech. "RRC" = Statistics of the data corresponds to RRC signalling. "Unknown" = The statistics of the data is unknown.

#### 9.2.1.66 UARFCN

The UTRA Absolute Radio Frequency Channel Number defines the carrier.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UARFCN			INTEGER(0. .16383,)	Corresponds to: 0.0Hz 3276.6MHz see TS 25.104 [6] and TS 25.105 [7].

#### 9.2.1.66A UE Identity

The UE Identity IE identifies the UE by one of its Permanent NAS Identifier.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE UE Identity	М			
>IMSI				
>>IMSI	М		9.2.1.31	
>IMEI				
>>IMEI	М		9.2.1.30T	
>IMEISV				
>>IMEISV	М		9.2.1.30U	

## 9.2.1.67 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			ENUMERAT	
			ED(Normal,	
			Silent,)	

#### 9.2.1.68 UL Interference Level

Void

#### 9.2.1.68A Uncertainty Ellipse

This IE contains the uncertainty ellipse used to describe a possible shape of the geographical area of a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uncertainty semi-major	Μ		INTEGER( 0127)	The uncertainty "r" is derived from the "uncertainty code" k by $r = 10x(1.1^{k}-1)$ .
Uncertainty semi-minor	Μ		INTEGER( 0127)	The uncertainty "r" is derived from the "uncertainty code" k by $r = 10x(1.1^{k}-1)$ .
Orientation of major axis	М		INTEGER( 0179)	The relation between the IE value (N) and the angle (a) in degrees it describes is $2N \le a < 2(N+1)$ . The values 90179 shall not be used.

# 9.2.1.68B 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 Uplink SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink SIR			INTEGER (- 82173)	Value = Uplink SIR/10. Unit dB. Range -8.2+17.3. Step 0.1 dB.

# 9.2.1.70 URA ID

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
URA ID			INTEGER(0. .65 535)	

#### 9.2.1.70A UTRAN Access Point Position

The UTRAN Access Point Position indicates the exact geographical position of the base station antenna.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	Μ		ENUMERAT ED(North, South)	
Degrees of Latitude	М		INTEGER( 02 <sup>23</sup> -1)	The IE value (N) is derived by this formula: $N \le 2^{2^3} X /90 < N+1$ X being the latitude in degree (0° 90°).
Degrees of Longitude	М		INTEGER( -2 <sup>23</sup> 2 <sup>23</sup> -1)	The IE value (N) is derived by this formula: $N \le 2^{2^4} X / 360 < N+1$ X being the longitude in degree (-180°+180°).

### 9.2.1.70B URA Information

The URA Information IE contains URA Information for one cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
URA ID	М		9.2.1.70		-	
Multiple URAs Indicator	М		9.2.1.41		_	
RNCs with Cells in the Accessed URA		0 <maxrncin URA-1&gt;</maxrncin 		Other RNCs having at least one cell in the URA identified by the URA ID IE.	_	
>RNC-ID	M		9.2.1.50	If the Extended RNC-ID IE is included in the URA Information IE, the RNC-ID IE shall be ignored.	_	
>Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

Range Bound	Explanation
maxRNCinURA	Maximum number of RNC in one URA.

## 9.2.1.70C User Plane Congestion Fields Inclusion

The *User Plane Congestion Fields Inclusion* IE is used by the DRNC to indicate to the SRNC to include in the HS-DSCH Data Frames the User Plane fields related to TNL Congestion Control for HSDPA (namely the Frame Sequence Number and the DRT, see TS 25.425 [32]).

	IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
	User Plane Congestion Fields Inclusion			ENUMERATED ( Shall be included)	
_ 1	1101031011			Shall be included)	

# 9.2.1.71 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
RNC-ID	M		9.2.1.50	If the <i>Extended RNC-ID</i> IE is included in the <i>UC-ID</i> IE, the <i>RNC-ID</i> IE shall be ignored.
C-ID	М		9.2.1.6	
Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.

# 9.2.1.72 Neighbouring TDD Cell Information LCR

The *Neighbouring TDD Cell Information LCR* IE provides information for 1.28Mcps TDD cells that are neighbouring cells to a cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring TDD Cell Information LCR		1 <maxnr OfLCRTD DNeighbo ursPerRN C&gt;</maxnr 			_	
>C-ID	Μ		9.2.1.6		_	
>UARFCN	М		9.2.1.66	Corresponds to Nt in TS 25.105 [7].	-	
>Frame Offset	0		9.2.1.30		-	
>Cell Parameter ID	Μ		9.2.1.8		_	
>SCTD Indicator	М		9.2.1.78		_	
>Cell Individual Offset	0		9.2.1.7		_	
>DPCH Constant Value	0		9.2.1.23		_	
>PCCPCH Power	0		9.2.1.43		-	
>Restriction State Indicator	0		9.2.1.48C		-	
>Coverage Indicator	0		9.2.1.12G		YES	ignore
>Antenna Co-location Indicator	0		9.2.1.2C		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Cell Capability Container TDD LCR	0		9.2.3.1b		YES	ignore
>SNA Information	0		9.2.1.52Ca		YES	ignore
>Multiple PLMN List	0		9.2.1.117		YES	ignore
>Cell Capability Container Extension TDD LCR	0		9.2.3.80		YES	ignore

Range bound	Explanation		
maxNrOfLCRTDDNeighboursPerRNC	Maximum number of neighbouring 1.28Mcps TDD cell for one cell.		

## 9.2.1.73 Permanent NAS UE Identity

This element is used to identify the UE in UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Choice Permanent NAS UE Identity				
>IMSI				
>>IMSI	М		9.2.1.31	

#### 9.2.1.74 SFN-SFN Measurement Reference Point Position

The SFN-SFN Measurement Reference Point Position indicates the exact geographical position of the SFN-SFN measurement reference point. The altitude shall be included when available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	Μ		9.2.1.30F	
Altitude and direction	0		9.2.1.2B	

## 9.2.1.75 UTRAN Access Point Position with Altitude

The UTRAN Access Point Position with Altitude indicates the exact geographical position of the base station antenna. The altitude shall be included when available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	Μ		9.2.1.30F	
Altitude and direction	0		9.2.1.2B	

### 9.2.1.76 SFN-SFN Measurement Time Stamp

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode	М			
>FDD				
>>SFN	М		9.2.1.52A	Indicates the SFN of the reference cell at which the measurement has been performed.
>TDD				
>>SFN	М		9.2.1.52A	Indicates the SFN of the reference cell at which the measurement has been performed.
>>Time Slot	М		9.2.1.56	Indicates the Time Slot of the reference cell at which this measurement has been performed.

## 9.2.1.77 SFN-SFN Value

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode	М			
>FDD				
>>SFN-SFN	М		INTEGER(0.	According to mapping in TS
			. 614399)	25.133 [23].
>TDD				1.28Mcps or 3.84Mcps TDD
>>SFN-SFN	М		INTEGER(0.	According to mapping in TS
			. 40961)	25.123 [24].
>TDD 7.68Mcps				
>>SFN-SFN	М		INTEGER(0.	According to mapping in TS
			. 81923)	25.123 [24].

#### 9.2.1.78 SCTD Indicator

Indicates if SCTD antenna diversity is applied or not to the PCCPCH and PICH [3.84Mcps TDD].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCTD Indicator			ENUMERAT ED(active, inactive)	

### 9.2.1.79 Congestion Cause

The Congestion Cause IE indicates the cause of a congestion situation:

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Congestion Cause			ENUMERATED (UTRAN Dynamic Resources, UTRAN Semistatic Resources, )	

The meaning of the different congestion cause values is described in the following table:

Congestion cause	Meaning
UTRAN Dynamic Resources	UL and/or DL resource congestion situation mainly caused by the UL
	and/or DL UTRAN Dynamic Resources. This type of congestion situation
	is, e.g. related to the limitation of the DL transmitted carrier power of the
	cell(s), or the UL Interference situation in the concerned cell(s).
UTRAN Semistatic Resources	UL and/or DL resource congestion situation mainly related to UTRAN
	Semistatic Resources (e.g. channelisation codes, Node-B resources,).

#### 9.2.1.80 TMGI

The TMGI is the unique identifier for an MBMS bearer service, see TS 23.003 [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLMN Identity	M		OCTET STRING (3)	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler</li> <li>bit 4 to 1 of octet n encoding digit 2n-1</li> <li>bit 8 to 5 of octet n encoding digit 2n</li> <li>The PLMN Identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>
Service ID	М		OCTET STRING (3)	

## 9.2.1.81 Transmission Mode

The Transmission Mode IE indicates the transmission mode used for MBMS data transmission in one cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Mode			ENUMERAT ED(PTP, PTM, Not Provided).	PTP: The MBMS data is transmitted through point to point channel. PTM: The MBMS data is transmitted through point to multipoint channel. Not Provided: The MBMS data is not transmitted in the DRNC.

#### 9.2.1.82 Access Point Name

The APN and IP Multicast Address uniquely identify an MBMS bearer service.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
APN	М		OCTET STRING (1255)	

## 9.2.1.83 IP Multicast Address

The APN and IP Multicast Address uniquely identify an MBMS bearer service.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP Multicast Address	M		OCTET STRING (416)	

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### 9.2.1.84 MBMS Bearer Service Full Address

This IE provides the full address of an MBMS Bearer Service otherwise identified by its TMGI.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Access Point Name	М		9.2.1.82	
IP Multicast Address	Μ		9.2.1.83	

### 9.2.1.85 Provided Information

This IE contains the relevant data concerned the direct information transfer procedure. *Provided Information* IE shall include at least one of the following IEs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
MBMS Channel Type Information	0		9.2.1.86			
MBMS Preferred Frequency Layer Information	0		9.2.1.87			
UpPCH Information LCR	0		9.2.3.55	Applicable to 1.28Mcps TDD only.	YES	ignore
ANR Report Indication	0		9.2.1.148		YES	ignore

### 9.2.1.86 MBMS Channel Type Information

This IE contains the channel types of a MBMS Bearer Service indicated by *TMGI* IE in one or more cells. *MBMS Channel Type Information* IE shall include at least one *C-ID* IE and *Affected UE Information for MBMS* IE in the *PTM Cell List* IE, the *PTP Cell List* IE and/or *Not Provided Cell List* IE.

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IE/Group Name	Presence	Range	IE Type and	Semantics	Criticality	Assigned
TMGI	M		<b>Reference</b> 9.2.1.80	Description		Criticality
PTM Cell List	IVI	0 <maxnrofcells></maxnrofcells>	9.2.1.00		_	
>C-ID	М	0	9.2.1.6		_	
>Affected UE Information for MBMS		0 <maxnrofues></maxnrofues>		This IE should not be included if the <i>ExtendedAff</i> <i>ected UE</i> <i>Information</i> <i>for MBMS</i> IE is included in the message.		
>>S-RNTI	М		9.2.1.53		—	
>Extended Affected UE Information for MBMS		0 <maxnrofues></maxnrofues>		The ExtendedAff ected UE Information S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.		
>>Extended S-RNTI	М		9.2.1.154		YES	ignore
PTP Cell List		0 <maxnrofcells></maxnrofcells>				
>C-ID >Affected UE Information	М	0 <maxnrofues></maxnrofues>	9.2.1.6		_	
for MBMS				should not be included if the <i>ExtendedAff</i> <i>ected UE</i> <i>Information</i> <i>for MBMS</i> IE is included in the message.		
>>S-RNTI	М		9.2.1.53		_	
>Extended Affected UE Information for MBMS		0 <maxnrofues></maxnrofues>		The ExtendedAff ected UE Information S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.		
>>Extended S-RNTI	Μ		9.2.1.154		YES	ignore
Not Provided Cell List	<u></u>	0 <maxnrofcells></maxnrofcells>			ļ	
>C-ID >Affected UE Information for MBMS	M	0 <maxnrofues></maxnrofues>	9.2.1.6	This IE should not be included if the <i>ExtendedAff</i> <i>ected UE</i> <i>Information</i> <i>for MBMS</i> IE is included in		

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TMGI	М		9.2.1.80		_	
				the		
>>S-RNTI	М		9.2.1.53	message.	_	
>Extended Affected UE Information for MBMS		0 <maxnrofues></maxnrofues>		The ExtendedAff ected UE Information S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.		
>>Extended S-RNTI	М		9.2.1.154		YES	ignore

Range Bound	Explanation
maxNrOfCells	Maximum number of cells that can be indicated in the corresponding IE.
maxNrOfUEs	Maximum number of S-RNTIs that can be indicated per cell in the respective IEs.

### 9.2.1.87 MBMS Preferred Frequency Layer Information

This IE contains the preferred frequency layer of a MBMS Bearer Service indicated by *TMGI* IE in one or more cells that host at least one CELL\_DCH UE whose UE Link contains the concerned MBMS Bearer Service and whose SRNC is different from the CRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TMGI	М		9.2.1.80	
Preferred Frequency Layer Information				
>Default Preferred	М		UARFCN	
Frequency			9.2.1.66	
>Additional Preferred Frequency		0 <maxnrofaddfr eq&gt;</maxnrofaddfr 		Preferred frequencies different from default preferred frequency.
>>DL UARFCN	М		UARFCN 9.2.1.66	
>>Corresponding Cells		1 <maxnrofcellsp erFreq&gt;</maxnrofcellsp 		
>>>C-ID	М		9.2.1.6	

Range Bound	Explanation
maxNrOfAddFreq	Maximum number of additional preferred frequencies different from
	default preferred frequency in an RNC.
maxNrOfCellsPerFreq	Maximum number of cells whose preferred frequency is the same.

### 9.2.1.88 E-DCH DDI Value

The *E-DCH DDI Value* IE is the Data Description Indicator value identifying a unique combination of E-DCH MAC-d Flow ID and MAC-d PDU Size.

IE/Group Nam	ne Presence	Range	IE Type and Reference	Semantics Description
E-DCH DDI Value			INTEGER (062)	

### 9.2.1.89 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 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 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 a E-DCH MAC-d flow, the DRNS 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.

### 9.2.1.90 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		1 <maxnrofedch< th=""><th></th><th></th></maxnrofedch<>		
Delete		MACdFlows>		
>E-DCH MAC-d Flow ID	М		9.2.1.91	

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

### 9.2.1.91 E-DCH MAC-d Flow ID

The *E-DCH MAC-d Flow ID* IE is the unique identifier for one MAC-d flow on E-DCH.

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IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow ID			INTEGER (0 maxNrOfED CHMACdFlo ws-1)	

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

### 9.2.1.91A 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 thet 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 TS 25.123 [24] and TS 25.425 [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)	

### 9.2.1.92 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	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Logical Channel Information		1 <maxnoof LogicalChan nels&gt;</maxnoof 			_	
>Logical Channel ID	М		9.2.1.97		-	
>Scheduling Priority Indicator	М		9.2.1.51A		-	
>Scheduling Information	М		9.2.1.101		-	
>MAC-es Guaranteed Bit Rate	0		9.2.1.98		—	
>E-DCH DDI Value	Μ		9.2.1.88	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< maxNrOfMA CdPDUSize			_	
>>MAC-d PDU Size	М		9.2.1.34A	Shall be ignored if <i>Maximum</i> <i>MAC-d PDU</i> <i>Size Extended</i> <i>IE</i> is present.	_	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.34D		YES	reject
>MAC-es Maximum Bit Rate LCR	0		9.2.3.59	1.28Mcps TDD only.	YES	ignore
>UE Aggregate Maximum Bit Rate Enforcement Indicator	0		NULL		YES	ignore

Range Bound	Explanation
maxNoOfLogicalChannels	Maximum number of logical channels.
maxNrOfMACdPDUSize	Maximum number of MAC-d PDU size per Logical Channels.

## 9.2.1.93 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	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Logical Channel Information		1 <maxnoof LogicalChan nels&gt;</maxnoof 			_	
>Logical Channel ID	М		9.2.1.97		-	
>Scheduling Priority Indicator	0		9.2.1.51A		_	
>Scheduling Information	0		9.2.1.101		-	
>MAC-es Guaranteed Bit Rate	0		9.2.1.98		-	
>E-DCH DDI Value	0		9.2.1.88	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.		
		0< maxNrOfMA CdPDUSize			_	
>>MAC-d PDU Size	М		9.2.1.34A		-	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.34D		YES	reject
>MAC-es Maximum Bit Rate LCR	0		9.2.3.59	1.28Mcps TDD only.	YES	ignore

Range Bound	Explanation
maxNoOfLogicalChannels	Maximum number of logical channels.
maxNrOfMACdPDUSize	Maximum number of MAC-d PDU size per Logical Channels.

## 9.2.1.94 E-RNTI

The E-RNTI IE is needed for the UE (or UE group) specific CRC in E-AGCH, see TS 25.319 [52].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RNTI			INTEGER (065535)	

### 9.2.1.95 E-DCH Processing Overload Level

The *E-DCH Processing Overload Level* IE defines the threshold that determines when DRNS shall indicate processing issue problems to the SRNC.

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 DRNS shall never indicate processing issue to the RNC.

### 9.2.1.96 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 Scheduling Info			INTEGER (06)	Unit: dB. Step: 1 dB.

### 9.2.1.97 Logical channel ID

The Logical Channel ID IE is used to identify a E-DCH logical channel in Scheduling Information that is sent over Uu.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Logical Channel ID		INTEGER (115)		

### 9.2.1.98 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 reference	Semantics description
Μ	AC-es Guaranteed Bit Rate			INTEGER	Unit: bit/s.
				(02^24-1,,	
				2^24256,000,	
				000)	

### 9.2.1.99 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			ENUMERAT ED (MAC-e Reset)	Means MAC-I Reset in case Maximum MAC-d PDU Size Extended is configured for an E-DCH Logical Channel.

### 9.2.1.100 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 Retransmissions for E-DCH			INTEGER (015)	

### 9.2.1.101 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			ENUMERAT ED ( Included, Not Included)	

### 9.2.1.102 DGANSS Corrections

This IE contains DGANSS corrections.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description	Criticality	Assigned Criticality
DGANSS Reference Time	М		INTEGER(035 70 by step of 30)	Seconds. Time in GNSS system time (modulo 3600 s) when the DGANSS corrections were calculated.	-	
DGANSS Information		1 to <maxsg nType&gt;</maxsg 			-	
>GANSS Signal ID	0		9.2.1.121		-	
>Status/Health	M		ENUMERATED (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/He alth	1 to <maxg ANSSS at&gt;</maxg 		If the Cipher information is included these fields are ciphered.	-	
>>Sat ID	М		INTEGER(063 )	Defined in TS 25.331 [16].	-	
>>IOD	М		BIT STRING(10)		-	

IE/Group name	Presence	Range	IE Type and Reference	Semantics description	Criticality	Assigned Criticality
>>UDRE	Μ		ENUMERATED (UDRE $\leq$ 1.0 m, 1.0m < UDRE $\leq$ 4.0m, 4.0m < UDRE $\leq$ 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	М		INTEGER(- 20472047)	Scaling factor 0.32 meters.	-	
>>RRC	М		INTEGER(- 127127)	Scaling factor 0.032 meters/sec.	-	
>>DGNSS Validity Period	0		9.2.1.138		YES	ignore

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.

## 9.2.1.103 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	М			/	_	
>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>	М		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 TS 25.331 [16].	—	
>>>e	М		BIT STRING(11)	Eccentricity, dimensionless (OS SIS ICD [53]).	_	
>>>ði	М		BIT STRING(11)	semi-circles (OS SIS ICD [53]).	—	
>>>OMEGADOT	М		BIT STRING(11)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi- circles/sec) (OS SIS ICD [53]).	_	
>>>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> (OS SIS ICD [53]).	_	
>>>OMEGA0	М		BIT STRING(16)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles) (OS SIS ICD [53]).	_	
>>>M0	Μ		BIT STRING(16)	Mean Anomaly at Reference Time (semi-circles) (OS SIS ICD [53]).	_	
>>>@	М		BIT STRING(16)	Argument of Perigee (semi-circles) (OS SIS ICD [53]).	_	
>>>af <sub>0</sub>	М		BIT STRING(14)	Seconds (OS SIS ICD [53]).	_	
>>>af <sub>1</sub>	М		BIT STRING(11)	sec/sec (OS SIS ICD [53]).	_	
>NAV Keplerian Parameters				Model 2.		
>>Keplerian NAV Almanac	M			<b>2</b>	YES	ignore
>>>T <sub>oa</sub>	М		INTEGER(02 55)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week	_	

	1		I			
				in GANSS TOD time base.		
>>>Satellite information NAV-KP		1 <maxga NSSSatA Imanac&gt;</maxga 			_	
>>>Sat ID	М		INTEGER (063)	Defined in TS 25.331 [16].	—	
>>>>e	М		BIT STRING(16)	Eccentricity, dimensionless (IS- QZSS [59]).	_	
>>>>δi	Μ		BIT STRING (16)	Correction to inclination, semi-circles (IS-QZSS [59]).	_	
>>>OMEGADOT	M		BIT STRING (16)	Rate of right ascension, semi-circles/sec (IS- QZSS [59]).	-	
>>>SV Health	М		BIT STRING (8)	Satellite health (IS- QZSS [59]).	_	
>>>>A <sup>1/2</sup>	M		BIT STRING (24)	Square root of the semi-major axis, meters <sup>1/2</sup> (IS-QZSS [59]).	-	
>>>OMEGA0	М		BIT STRING (24)	Longitude of ascending node of orbit plane at weekly epoch, semi-circles (IS-QZSS [59]).	_	
>>>>@	М		BIT STRING (24)	Argument of perigee semi-circles (IS-QZSS [59]).	_	
>>>>Mo	M		BIT STRING (24)	Mean anomaly at reference time semi-circles (IS-QZSS [59]).	-	
>>>af <sub>0</sub>	M		BIT STRING (11)	Apparent satellite clock correction seconds (IS-QZSS [59]).	_	
>>>af <sub>1</sub>	M		BIT STRING (11)	Apparent satellite clock correction sec/sec (IS-QZSS [59]).	_	
>Reduced Keplerian Parameters				Model 3.		
>>Keplerian Reduced Almanac	М				YES	ignore
>>>T <sub>oa</sub>	М		INTEGER(02 55)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week in GANSS TOD time base.	_	
>>>Satellite information RED-KP		1 <maxga NSSSatA Imanac&gt;</maxga 			_	
>>>Sat ID	М		INTEGER (063)	Defined in TS 25.331 [16].	-	
>>>>δ <sub>A</sub>	M		BIT STRING(8)	meters (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS- QZSS [59]).	-	
$>>> \Omega_0$	М		BIT STRING (7)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57],	_	

	1		1			
				IS-QZSS [59]).		
>>>> $\Phi_0$	М		BIT STRING (7)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	-	
>>>L1 Health	М		BIT STRING (1)	dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	-	
>>>L2 Health	М		BIT STRING (1)	dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	-	
>>>L5 Health	М		BIT STRING (1)	dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]). Model 4.	-	
Parameters						
>> Keplerian Midi Almanac	М				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 MIDI-KP		1 <maxga NSSSatA Imanac&gt;</maxga 			-	
>>>Sat ID	М		INTEGER (063)	Defined in TS 25.331 [16].	_	
>>>e	M		BIT STRING(11)	dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	_	
>>>>ð <sub>i</sub>	M		BIT STRING (11)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	-	
>>>>Ω_dot	M		BIT STRING (11)	semi-circles/sec (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	-	
>>>sqrtA	M		BIT STRING (17)	meters <sup>1/2</sup> (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS- QZSS [59]).	_	
>>>>Ω <sub>0</sub>	М		BIT STRING (16)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	-	
>>>>0	M		BIT STRING (16)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	_	
>>>>M <sub>0</sub>	M		BIT STRING (16)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	_	
>>>a <sub>fo</sub>	М		BIT STRING (11)	seconds (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-	-	

	1	1				1
				QZSS [59]).		
>>>a <sub>f1</sub>	М		BIT STRING (10)	sec/sec (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-	_	
				QZSS [59]).		
>>>>L1 Health	M		BIT STRING (1)	Dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	-	
>>>L2 Health	M		BIT STRING (1)	dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	-	
>>>L5 Health	М		BIT STRING (1)	dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	_	
>GLONASS Keplerian				Model 5.		
Parameters	N4					:
>> Keplerian GLONASS	М	4			YES	ignore
>>>Satellite information GLO-KP		1 <maxga NSSSatA Imanac&gt;</maxga 			_	
>>>>N <sup>A</sup>	М		BIT STRING(11)	days [60].	_	
>>>>n <sup>A</sup>	М		BIT STRING (5)	dimensionless [60].	_	
>>>>Hn <sup>A</sup>	М		BIT STRING (5)	dimensionless [60].	_	
>>>>\\n^A	М		BIT STRING (21)	semi-circles [60].	_	
>>>t <sub>\lambda n</sub> ^A	М		BIT STRING (21)	seconds [60].	_	
>>>>∆i <sub>n</sub> <sup>A</sup>	М		BIT STRING (18)	semi-circles [60].	_	
>>>> $\Delta T_n^A$	М		BIT STRING (22)	sec/orbit period [60].	_	
>>>\DT_DOT_A	M		BIT STRING (7)	sec/orbit period <sup>2</sup> [60.]	_	
>>>>& <sup>A</sup>	M		BIT STRING (15)	dimensionless [60].	-	
>>>>mathcal{m	M		BIT STRING (16)	semi-circles [60].	_	
>>>>t <sub>n</sub> <sup>A</sup>	M		BIT STRING (10)	seconds [60].	_	
>>>>l	М		BIT STRING (1)	dimensionless [60].	_	
>>>>Mn <sup>A</sup>	0		BIT STRING (2)	dimensionless [60].	-	
>SBAS ECEF Parameters	M			Model 6.	VEO	icnore
>> ECEF SBAS Almanac	М	4			YES	ignore
>>>Satellite information SBAS- ECEF		1 <maxga NSSSatA Imanac&gt;</maxga 			-	
>>>>Data ID	М		BIT STRING(2)	Dimensionless (DTFA01-96-C-00025 [58]).	_	
>>>SV ID	М		INTEGER (063)	Defined in TS 25.331 [16]	-	
>>>Health	М		BIT STRING (8)	Dimensionless (DTFA01-96-C-00025	-	

			[58]).		
>>>>X <sub>G</sub>	М	BIT STRING (15)	meters (DTFA01-96- C-00025 [58]).	_	
>>>>Y <sub>G</sub>	Μ	BIT STRING (15)	meters (DTFA01-96- C-00025 [58]).	_	
>>>>Z <sub>G</sub>	Μ	BIT STRING (9)	meters (DTFA01-96- C-00025 [58]).	_	
>>>X <sub>G</sub> Rate-of- Change	Μ	BIT STRING (3)	meters/sec (DTFA01- 96-C-00025 [58]).	_	
>>>Y <sub>G</sub> Rate-of- Change	Μ	BIT STRING (3)	meters/sec (DTFA01- 96-C-00025 [58]).	_	
>>>Z <sub>G</sub> Rate-of- Change	Μ	BIT STRING (4)	meters/sec (DTFA01- 96-C-00025 [58]).	_	
>>>t <sub>0</sub>	Μ	BIT STRING (11)	seconds (DTFA01-96- C-00025 [58]).	-	
Complete Almanac Provided	0	BOOLEAN	This field indicates whether almanac is provided for the full GANSS constellation or not. TRUE means complete GANSS almanac is provided.	YES	ignore

Range Bound	Explanation
maxGANSSSatAlmanac	Maximum number of satellites for which data is included in the IE.

### 9.2.1.104 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>	М		BIT STRING(14)	defined in OS SIS ICD [53].
>a <sub>i2</sub>	Μ		BIT STRING(12)	defined in OS SIS ICD [53].
>a <sub>i1</sub>	Μ		BIT STRING(18)	defined in OS SIS ICD [53].
>a <sub>i0</sub>	М		BIT STRING(28)	defined in OS SIS ICD [53].
>T <sub>GD</sub>	0		BIT STRING(10)	defined in OS SIS ICD [53].
>Model ID	0		INTEGER(0. .1)	Coded as defined in TS 25.331 [16].

Range bound	Explanation
maxGANSSClockMod	Maximum number of satellite clock models for which data is included in the IE.

### 9.2.1.104a 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
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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	Time of clock
			STRING(16)	(seconds) (IS-QZSS [59]).
>>af <sub>2</sub>	Μ		BIT STRING	Clock correction polynomial
			(8)	coefficient
				(sec/sec <sup>2</sup> ) (IS-QZSS [59]).
>>af <sub>1</sub>	Μ		BIT STRING	Clock correction polynomial
			(16)	coefficient
				(sec/sec) (IS-QZSS [59]).
$>>af_0$	М		BIT STRING	Clock correction polynomial
			(22)	coefficient
	· · · · · · · · · · · · · · · · ·			(seconds) (IS-QZSS [59]).
>>T <sub>GD</sub>	М		BIT STRING	Group delay
			(8)	(seconds) (IS-QZSS [59]).
>CNAV/CNAV-2 Clock Model	· · · · · · · · · · · · · · · · ·			Model-3.
>>t <sub>oc</sub>	М		BIT STRING	Clock data reference time of
			(11)	week
				(seconds) (IS-GPS-200 [55],
				IS-GPS-705 [56], IS-GPS-800
	M		BIT STRING	[57], IS-QZSS [59]). Clock data predict time of
>>t <sub>op</sub>	М			week
			(11)	(seconds) (IS-GPS-200 [55],
				(Seconds) (13-GP3-200 [55], IS-GPS-705 [56], IS-GPS-800
				[57], IS-QZSS [59]).
>>URA <sub>oc</sub> Index	М		BIT STRING	SV clock accuracy index
>>ordioc index	IVI		(5)	(dimensionless) (IS-GPS-200
			(5)	[55], IS-GPS-705 [56], IS-
				GPS-800 [57], IS-QZSS [59]).
>>URA <sub>oc1</sub> Index	М		BIT STRING	SV clock accuracy change
	101		(3)	index
			(0)	(dimensionless) (IS-GPS-200
				[55], IS-GPS-705 [56], IS-
				GPS-800 [57], IS-QZSS [59]).
>>URA <sub>oc2</sub> Index	Μ		BIT STRING	SV clock accuracy change rate
			(3)	index
				(dimensionless) (IS-GPS-200
				[55], IS-GPS-705 [56], IS-
				GPS-800 [57], IS-QZSS [59]).
>>a <sub>f2-n</sub>	M		BIT STRING	SV clock drift rate correction
			(10)	coefficient
				(sec/sec <sup>2</sup> ) (IS-GPS-200 [55],
				IS-GPS-705 [56], IS-GPS-800
	+			[57], IS-QZSS [59]).
>>a <sub>fl-n</sub>	М		BIT STRING	SV clock drift correction
			(20)	
				(sec/sec) (IS-GPS-200 [55],
				IS-GPS-705 [56], IS-GPS-800
~~~~	N.4			[57], IS-QZSS [59]).
>>a <sub>f0-n</sub>	М		BIT STRING	SV clock bias correction
			(26)	coefficient
				(seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800
				[57], IS-QZSS [59]).
>>T <sub>GD</sub>	М		BIT STRING	Group delay correction
			(13)	(seconds) (IS-GPS-200 [55],
				IS-GPS-705 [56], IS-GPS-800
				[57], IS-QZSS [59]).
>>ISC <sub>L1CP</sub>	0		BIT STRING	Inter signal group delay
	Ŭ I		(13)	correction
			( /	(seconds) (IS-GPS-800 [57],
				IS-QZSS [59]).
	0		BIT STRING	Inter signal group delay
>>ISC <sub>L1CD</sub>				

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
				(seconds) (IS-GPS-800 [57], IS-QZSS [59]).
>>ISC <sub>L1C/A</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-QZSS [59]).
>>ISC <sub>L2C</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-QZSS [59]).
>>ISCL515	0		BIT STRING (13)	Inter signal group delay correction (seconds) (IS-GPS-705 [56], IS-QZSS [59]).
>>ISC <sub>L5Q5</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) (IS-GPS-705 [56], IS-QZSS [59]).
>GLONASS Satellite Clock Model				Model-4.
$>\tau_n(t_b)$	М		BIT STRING (22)	Satellite clock offset (seconds) [60].
$>\gamma_n(t_b)$	Μ		BIT STRING (11)	Relative frequency offset from nominal value (dimensionless) [60].
$>\Delta \tau_n$	0		BIT STRING (5)	Time difference between transmission in G2 and G1 (seconds) [60].
>SBAS Satellite Clock Model				Model-5
>t <sub>0</sub>	М		BIT STRING (13)	(seconds) (DTFA01-96-C- 00025 [58]).
>a <sub>Gfo</sub>	М		BIT STRING (12)	(seconds) (DTFA01-96-C- 00025 [58]).
>a <sub>Gf1</sub>	М		BIT STRING (8)	(sec/sec) (DTFA01-96-C- 00025 [58]).

## 9.2.1.105 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 <sub>i0</sub>	М		BIT STRING(12)	This parameter is used as defined in OS SIS ICD [53].
a <sub>i1</sub>	М		BIT STRING(12)	This parameter is used as defined in OS SIS ICD [53].
a <sub>i2</sub>	М		BIT STRING(12)	This parameter is used as defined in OS SIS ICD [53].
GANSS Ionosphere Regional Storm Flags		01		
>Storm Flag 1	М		BOOLEAN	This parameter is used as defined in OS SIS ICD [53].
>Storm Flag 2	М		BOOLEAN	This parameter is used as defined in OS SIS ICD [53].
>Storm Flag 3	М		BOOLEAN	This parameter is used as defined in OS SIS ICD [53].
>Storm Flag 4	М		BOOLEAN	This parameter is used as defined in OS SIS ICD [53].
>Storm Flag 5	М		BOOLEAN	This parameter is used as defined in OS SIS ICD [53].

## 9.2.1.105a 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 Reference	Semantics description
Data ID	Μ		BIT STRING(2)	Coded as defined in TS 25.331 [16].
α <sub>0</sub>	М		BIT STRING (8)	seconds (IS-QZSS [59]).
α <sub>1</sub>	М		BIT STRING (8)	sec/semi-circle (IS-QZSS [59]).
α <sub>2</sub>	М		BIT STRING (8)	sec/(semi-circle) <sup>2</sup> (IS-QZSS [59]).
α <sub>3</sub>	М		BIT STRING (8)	sec/(semi-circle) <sup>3</sup> (IS-QZSS [59]).
βο	М		BIT STRING (8)	seconds (IS-QZSS [59]).
β1	М		BIT STRING (8)	sec/semi-circle (IS-QZSS [59]).
β <sub>2</sub>	М		BIT STRING (8)	sec/(semi-circle) <sup>2</sup> (IS-QZSS [59]).
β <sub>3</sub>	M		BIT STRING (8)	sec/(semi-circle) <sup>3</sup> (IS-QZSS [59]).

## 9.2.1.106 GANSS Navigation Model

Void.

### 9.2.1.107 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	М			
>Keplerian Parameters				Model-1.
>>t <sub>oe</sub>	М		BIT STRING(14)	Time-of-Ephemeris in seconds, scale factor 60 (OS SIS ICD [53]).
>>ω	М		BIT STRING(32)	Argument of Perigee (semi- circles) (OS SIS ICD [53]).
>>∆n	М		BIT STRING(16)	Mean Motion Difference From Computed Value (semi- circles/sec) (OS SIS ICD [53]).
>>M0	М		BIT STRING(32)	Mean Anomaly at Reference Time (semi-circles) (OS SIS ICD [53]).
>>OMEGAdot	М		BIT STRING(24)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles/sec) (OS SIS ICD [53]).
>>e	М		BIT STRING(32)	Eccentricity, scale factor 2 <sup>-33</sup> (OS SIS ICD [53]).
>>ldot	М		BIT STRING(14)	Rate of Inclination Angle (semi-circles/sec) (OS SIS ICD [53]).
>>sqrtA	М		BIT STRING(32)	Least significant bits of Semi- Major Axis in (meters) <sup>1/2</sup> , scale factor 2 <sup>-19</sup> (OS SIS ICD [53]).
>>i <sub>0</sub>	М		BIT STRING (32)	Inclination Angle at Reference Time (semi-circles) (OS SIS ICD [53]).

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>OMEGA <sub>0</sub>	М		BIT STRING(32)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles) (OS SIS ICD [53]).
>>C <sub>rs</sub>	М		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term to the Orbit Radius (meters) (OS SIS ICD [53]).
>>C <sub>is</sub>	М		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term To The Angle Of Inclination (radians) (OS SIS ICD [53]).
>>C <sub>us</sub>	М		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term To The Argument Of Latitude (radians) (OS SIS ICD [53]).
>>Crc	М		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term to the Orbit Radius (meters) (OS SIS ICD [53]).
>>C <sub>ic</sub>	М		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term To The Angle Of Inclination (radians) (OS SIS ICD [53]).
>>C <sub>uc</sub>	М		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term To The Argument Of Latitude (radians) (OS SIS ICD [53]).

## 9.2.1.107a 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) (IS-QZSS [59]).
>>Fit Interval Flag	М		BIT STRING (1)	Fit interval indication (dimensionless) (IS-QZSS [59]).
>>t <sub>oe</sub>	М		BIT STRING(16)	Time of ephemeris (seconds) (IS-QZSS [59]).
>>0	М		BIT STRING (32)	Argument of perigee (semi-circles) (IS-QZSS [59]).
>>∆n	Μ		BIT STRING (16)	Mean motion difference from computed value (semi-circles/sec) (IS-QZSS [59]).
>>M <sub>0</sub>	М		BIT STRING (32)	Mean anomaly at reference time (semi-circles) (IS-QZSS [59]).
>>OMEGAdot	М		BIT STRING (24)	Rate of right ascension (semi-circles/sec) (IS-QZSS [59]).
>>e	Μ		BIT STRING (32)	Eccentricity (dimensionless) (IS-QZSS [59]).
>>ldot	М		BIT STRING (14)	Rate of inclination angle (semi-circles/sec) (IS-QZSS [59]).

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>sqrtA	Μ		BIT STRING (32)	Square root of semi-major axis (meters <sup>1/2</sup> ) (IS-QZSS [59]).
>>i <sub>0</sub>	Μ		BIT STRING (32)	Inclination angle at reference time (semi-circles) (IS-QZSS [59]).
>>OMEGA <sub>0</sub>	М		BIT STRING (32)	Longitude of ascending node of orbit plane at weekly epoch (semi-circles) (IS-QZSS [59]).
>>C <sub>rs</sub>	М		BIT STRING (16)	Amplitude of sine harmonic correction term to the orbit radius (meters) (IS-QZSS [59]).
>>C <sub>is</sub>	М		BIT STRING (16)	Amplitude of sine harmonic correction term to the angle of inclination (radians) (IS-QZSS [59]).
>>C <sub>us</sub>	М		BIT STRING (16)	Amplitude of sine harmonic correction term to the argument of latitude (radians) (IS-QZSS [59]).
>>C <sub>rc</sub>	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the orbit radius (meters) (IS-QZSS [59]).
>>C <sub>ic</sub>	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the angle of inclination (radians) (IS-QZSS [59]).
>>C <sub>uc</sub>	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the argument of latitude (radians) (IS-QZSS [59]).

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) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>URA <sub>oe</sub> Index	М		BIT STRING (5)	SV accuracy (dimensionless) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>∆A	М		BIT STRING (26)	Semi-major axis difference at reference time (meters) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>A_dot	М		BIT STRING (25)	Chane rate in semi-major axis (meters/sec) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>∆n <sub>0</sub>	М		BIT STRING (17)	Mean motion difference from computed value at reference time (semi-circles/sec) (IS-GPS- 200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>∆n <sub>0</sub> _dot	м		BIT STRING (23)	Rate of mean motion difference from computed value (semi-circles/sec <sup>2</sup> ) (IS-GPS- 200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>M <sub>0-n</sub>	M		Bit String(33)	Mean anomaly at reference time (semi-circles) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>en	М		BIT STRING (33)	Eccentricity (dimensionless) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>00n	М		Bit String(33)	Argument of perigee (semi-circles) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>Ω <sub>0-n</sub>	М		BIT STRING (33)	Reference right ascension angle (semi-circles) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>∆Ω_dot	м		BIT STRING (17)	Rate of right ascension difference (semi-circles/sec) (IS-GPS- 200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>i <sub>o-n</sub>	М		BIT STRING (33)	Inclination angle at reference time (semi-circles) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>I <sub>0-n</sub> _dot	М		BIT STRING (15)	Rate of inclination angle (semi-circles/sec) (IS-GPS- 200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>C <sub>is-n</sub>	М		BIT STRING (16)	Amplitude of sine harmonic correction term to the angle of inclination (radians) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>C <sub>ic-n</sub>	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the angle of inclination (radians) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>C <sub>rs-n</sub>	М		BIT STRING (24)	Amplitude of sine harmonic correction term to the orbit radius (meters) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>Crc-n	М		BIT STRING (24)	Amplitude of cosine harmonic correction term to the orbit radius (meters) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>C <sub>us-n</sub>	М		BIT STRING (21)	Amplitude of sine harmonic correction term to the argument of latitude (radians) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>C <sub>uc-n</sub>	М		BIT STRING (21)	Amplitude of cosine harmonic correction term to the argument of latitude (radians) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>GLONASS Earth-Centered, Earth-fixed Parameters				Model-4.
>>En	М		BIT STRING (5)	Age of data (days) [60].
>>P1	М		BIT STRING (2)	Time interval between two adjacent values of t <sub>b</sub> (minutes) [60].
>>P2	М		BIT STRING (1)	Change of t <sub>b</sub> flag (dimensionless) [60].
>>M	0		BIT STRING (2)	Type of satellite (dimensionless) [60].
$>> x_n(t_b)$	М		BIT STRING (27)	x-coordinate of satellite at time t <sub>b</sub> (kilometers) [60]
$>> \dot{x}_n(t_b)$	М		BIT STRING (24)	x-coordinate of satellite velocity at time $t_b$ (kilometers/sec) [60].
$>> \ddot{x}_n(t_b)$	М		BIT STRING (5)	x-coordinate of satellite acceleration at time $t_b$ (kilometers/sec <sup>2</sup> ) [60].
$>> y_n(t_b)$	М		BIT STRING (27)	y-coordinate of satellite at time t <sub>b</sub> (kilometers) [60].
$>> \dot{y}_n(t_b)$	М		BIT STRING (24)	y-coordinate of satellite velocity at time $t_b$ (kilometers/sec) [60].
$>> \ddot{y}_n(t_b)$	М		BIT STRING (5)	y-coordinate of satellite acceleration at time $t_b$ (kilometers/sec <sup>2</sup> ) [60].

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
$>> z_n(t_b)$	М		BIT STRING (27)	z-coordinate of satellite at time t <sub>b</sub> (kilometers) [60].
$>> \dot{z}_n(t_b)$	M		BIT STRING (24)	z-coordinate of satellite velocity at time $t_b$ (kilometers/sec) [60].
$\Rightarrow$ $\ddot{z}_n(t_b)$	М		BIT STRING (5)	z-coordinate of satellite acceleration at time $t_b$ (kilometers/sec <sup>2</sup> ) [60].
>SBAS Earth-Centered, Earth- fixed Parameters				Model-5.
>>t <sub>0</sub>	C-ClockMo del		BIT STRING (13)	Time of applicability (seconds) (DTFA01-96-C- 00025 [58]).
>>Accuracy	М		BIT STRING (4)	(dimensionless) (DTFA01-96- C-00025 [58]).
>>X <sub>G</sub>	М		BIT STRING (30)	(meters) (DTFA01-96-C-00025 [58]).
>>Y <sub>G</sub>	М		BIT STRING (30)	(meters) (DTFA01-96-C-00025 [58]).
>>Z <sub>G</sub>	М		BIT STRING (25)	(meters) (DTFA01-96-C-00025 [58]).
>>X <sub>G</sub> Rate-of-Change	М		BIT STRING (17)	(meters/sec) (DTFA01-96-C- 00025 [58]).
>>Y <sub>G</sub> Rate-of-Change	М		BIT STRING (17)	(meters/sec) (DTFA01-96-C- 00025 [58]).
>>Z <sub>G</sub> Rate-of-Change	М		BIT STRING (18)	(meters/sec) (DTFA01-96-C- 00025 [58]).
>>X <sub>G</sub> Acceleration	М		BIT STRING (10)	(meters/sec <sup>2</sup> ) (DTFA01-96-C- 00025 [58]).
>>Y <sub>G</sub> Acceleration	М		BIT STRING (10)	meters/sec <sup>2</sup> ) (DTFA01-96-C- 00025 [58]).
>>Z <sub>G</sub> Acceleration	М		BIT STRING (10)	meters/sec <sup>2</sup> ) (DTFA01-96-C- 00025 [58]).

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.

### 9.2.1.108 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 Reference	Semantics description
Satellite Information		1 to <maxgan SSSat&gt;</maxgan 		
>Bad GANSS Sat ID	Μ		INTEGER(0. .63)	Defined in TS 25.331 [16].
>Bad GANSS Signal ID	0		BIT STRING(8)	Coded as defined in TS 25.331 [16].

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE.

## 9.2.1.109 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	М		INTEGER (02 <sup>31</sup> -1)	The IE value (N) is derived by this formula: $N \le 2^{31} X / 90 < N+1$ X being the latitude in degree (0° 90°).
Degrees of Longitude	М		INTEGER (-2 <sup>31</sup> 2 <sup>31</sup> -1)	The IE value (N) is derived by this formula: $N \le 2^{32} X / 360 < N+1$ X being the longitude in degree (-180°+180°).
Direction of Altitude	М		ENUMERATED( Height, Depth)	
Altitude	Μ		INTEGER (02 <sup>15</sup> -1)	The relation between the value (N) and the altitude (a) in meters it describes is $N \le a$ <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,>

### 9.2.1.110 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	Criticality	Assigned Criticality
GANSS Time Model Reference Time	M		INTEGER(0377 99)	GANSS reference time (modulo 1 week) in seconds. The scale factor is 2 <sup>4</sup>	_	
T <sub>A0</sub>	М		INTEGER(- 214748364821 47483647)	Seconds, scale factor 2 <sup>-</sup> 35	-	
T <sub>A1</sub>	0		INTEGER (- 838860883886 07)	sec/sec, scale factor 2 <sup>-51</sup>	-	
T <sub>A2</sub>	0		INTEGER (- 6463)	sec/sec <sup>2</sup> , scale factor 2 <sup>-</sup>	-	
GNSS_TO_ID	M		ENUMERATED( GPS,, Galileo, QZSS, GLONASS)		-	
Week Number	0		INTEGER(0819 1)	Reference week of GANSS Time Model.	_	
Delta_T	0		INTEGER (- 128127)	This field specifies the integer seconds of the GNSS-GNSS Time Offset. Scale factor 1 second.	YES	ignore

## 9.2.1.110a 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			9.2.1.110	

Range Bound	Explanation
maxGANSS-1	Maximum number of GANSS systems for which data is included in this IE.

### 9.2.1.111 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 (OS SIS ICD [53]).
A <sub>0</sub>	М		BIT STRING(32)	seconds (OS SIS ICD [53]).
t <sub>ot</sub>	М		BIT STRING(8)	seconds (OS SIS ICD [53]).
WNt	М		BIT STRING(8)	weeks (OS SIS ICD [53]).
$\Delta t_{LS}$	М		BIT STRING(8)	seconds (OS SIS ICD [53]).
WN <sub>LSF</sub>	М		BIT STRING(8)	weeks (OS SIS ICD [53]).
DN	М		BIT STRING(8)	days (OS SIS ICD [53]).
$\Delta t_{LSF}$	М		BIT STRING(8)	seconds (OS SIS ICD [53]).

### 9.2.1.111a 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 IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], DTFA01-96-C-00025 [58], IS-QZSS [59], [60].

IE/Group name	Presence	Range	IE Type and Reference	Semantics description

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) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800
>A <sub>1-n</sub>	M		BIT STRING (13)	[57], IS-QZSS [59]). Drift coefficient of GNSS time scale relative to UTC time scale (sec/sec) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800
>A <sub>2-n</sub>	M		BIT STRING (7)	[57], IS-QZSS [59]). Drift rate correction coefficient of GNSS time scale relative to UTC time scale (sec/sec <sup>2</sup> ) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
$>\Delta t_{LS}$	М		BIT STRING (8)	Current or past leap second count (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>t <sub>ot</sub>	М		BIT STRING (16)	Time data reference time of week (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>WN <sub>ot</sub>	М		BIT STRING (13)	Time data reference week number (weeks) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>WN <sub>LSF</sub>	М		BIT STRING (8)	Leap second reference week number (weeks) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>DN	М		BIT STRING (4)	Leap second reference day number (days) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
$>\Delta t_{LSF}$	М		BIT STRING (8)	Current or future leap second count (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>Model Set 2				
>N <sup>A</sup>	Μ		BIT STRING (11)	Callendar day number within four-year period beginning since the leap year (days) [60].
>tc	М		BIT STRING (32)	GLONASS time scale correction to UTC(SU) (seconds) [60].
>Delta UT1	0			
>>B1	М		BIT STRING (11)	Coefficient to determine $\Delta$ UT1 (seconds) [60].
>>B2	М		BIT STRING (10)	Coefficient to determine $\Delta$ UT1 (seconds/msd) [60].
>KP	0		BIT STRING (2)	Notification of expected leap second correction

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
				(dimensionless) [60].
>Model Set 3				
>A <sub>1WNT</sub>	М		BIT STRING (24)	sec/sec (DTFA01-96-C-00025 [58], Message Type 12).
>A <sub>ownt</sub>	М		BIT STRING (32)	seconds (DTFA01-96-C-00025 [58], Message Type 12).
>t <sub>ot</sub>	М		BIT STRING (8)	seconds (DTFA01-96-C-00025 [58], Message Type 12).
>WNt	М		BIT STRING (8)	weeks (DTFA01-96-C-00025 [58], Message Type 12).
$>\Delta t_{LS}$	М		BIT STRING (8)	seconds (DTFA01-96-C-00025 [58], Message Type 12).
>WN <sub>LSF</sub>	М		BIT STRING (8)	Weeks (DTFA01-96-C-00025 [58], Message Type 12).
>DN	М		BIT STRING (8)	days (DTFA01-96-C-00025 [58], Message Type 12).
$>\Delta t_{LSF}$	М		BIT STRING (8)	seconds (DTFA01-96-C-00025 [58], Message Type 12).
>UTC Standard ID	М		BIT STRING (3)	dimensionless Coded as defined in TS 25.331 [16].

### 9.2.1.112 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
T <sub>UTRAN-GANSS</sub> Accuracy Class			ENUMERAT ED (Accuracy Class A, Accuracy Class B, Accuracy Class C,)	More information about Measurement Accuracy Class is included in TS 25.133 [23].

### 9.2.1.113 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(1. .256)	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(1. .256)	Deviation of the Predicted $T_{UTRAN-GANSS}$ from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

## 9.2.1.114 T<sub>UTRAN-GANSS</sub> Measurement Value Information

The T<sub>UTRAN-GANSS</sub> *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	Semantics Description	Criticality	Assigned Criticality
			Reference	_		_
Tutran-ganss	Μ			Indicates the UTRAN GANSS Timing of Cell Frames for UE Positioning. According to mapping in TS 25.133 [23] and TS 25.123 [24]; 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 <sub>UTRAN</sub> - GANSS measurements in 1/16 chip. T <sub>UTRAN</sub> - GANSS Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported T <sub>UTRAN</sub> - GANSS Value, where x is the reported T <sub>UTRAN</sub> - GANSS Value and $\mu = E[x]$ is the expectation value of x.	_	
T <sub>UTRAN-GANSS</sub> Drift Rate	M		INTEGER(- 5050)	Indicates the T <sub>UTRAN</sub> - 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.	_	
T <sub>UTRAN-GANSS</sub> Drift Rate Quality	0		INTEGER(0 50)	Indicates the standard deviation (std) of the T <sub>UTRAN</sub> - GANSS drift rate measurements in 1/256 chip per second. T <sub>UTRAN</sub> - GANSS Drift Rate Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported T <sub>UTRAN</sub> - GANSS Drift Rate, where x is the		

			reported T <sub>UTRAN-</sub> GANSS Drift Rate and $\mu = E[x]$ is the expectation value of x.		
GANSS Time ID	0	9.2.1.119a	Absence of this IE means Galileo system time.	YES	ignore

## 9.2.1.115 GANSS Reference Time

Void.

# 9.2.1.116 HARQ Memory Partitioning

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE HARQ Memory		1	Reference		_	
Partitioning		,				
>Implicit					_	
>>Number of Processes	М		INTEGER (18,12,1 4,16)	For HARQ process IDs going from 0 to "Number of Processes" – 1 the Total number of soft channel bits (TS 25.306 [42]) is partitioned equally between all HARQ processes according to the rules in TS 25.331 [16].	_	
>Explicit					_	
>>HARQ Memory Partitioning I		1 <maxnr OfHARQP roc&gt;</maxnr 		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	М		9.2.1.49D	See TS 25.331 [16].	_	
>>HARQ Memory Partitioning Information Extension For MIMO		0, 4, 6 or 8		FDD and 1.28Mcps TDD only The 1 <sup>st</sup> instance corresponds to HARQ process with identifier set to "maxnoofHARQp rocesses", the 2 <sup>nd</sup> instance to HARQ process with identifier set to "maxnoofHARQp rocesses+1", and so on.	GLOBAL	ignore
>>>Process Memory Size	M		9.2.1.49D	See TS 25.331 [16].	-	

Range Bound	Explanation
MaxNrOfHARQProc	Maximum number of HARQ processes for one UE [FDD – per stream (the maximum number of HARQ processes per UE is 2 * <i>MaxnoofHARQprocesses</i> in dual stream transmission mode)].

### 9.2.1.117 Multiple PLMN List

This information element contains a list of PLMN identities, which identifies the broadcasted PLMN Identities in MOCN and GWCN shared network configurations. The mandatory PLMN Identity in the MIB (called common PLMN in TS 23.251 [54]) is the first PLMN.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PLMN Identity	M		OCTET STRING (SIZE (3))	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler.</li> <li>bit 4 to 1 of octet n encoding digit 2n-1.</li> <li>bit 8 to 5 of octet n encoding digit 2n.</li> <li>The PLMN identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>
List of PLMNs		0 <maxnrofbroadc astPLMNs&gt;</maxnrofbroadc 		
>PLMN Identity	M		OCTET STRING (SIZE (3))	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler.</li> <li>bit 4 to 1 of octet n encoding digit 2n-1.</li> <li>bit 8 to 5 of octet n encoding digit 2n.</li> <li>The PLMN identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>

Range bound	Explanation
maxNrOfBroadcastPLMNs	Maximum number of additional PLMN identitys that can be
	broadcasted in a cell involved in a MOCN or GWCN Shared
	Network configuration. The value for maxNrOfBroadcastPLMNs is 5.

### 9.2.1.118 GANSS Data Bit Assistance

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS TOD	Μ		INTEGER(059,)	Refererence 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	М		INTEGER(063)	Defined in TS 25.331 [16].
>Data Bit Assistance		1 <maxsgnty< td=""><td></td><td></td></maxsgnty<>		
Sgn List		pe>		
>>GANSS Signal ID	Μ		9.2.1.121	
>>Data Bits	Μ		BIT	Raw data bits as transmitted
			STRING(11024)	from a specific satellite at the time indicated by GANSS_TOD. See TS 25.331 [16].

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.

### 9.2.1.119 GANSS ID

This IE defines a particular GANSS.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
GANSS ID	Μ		INTEGER(07 ,)	Defines the GANSS and is coded as defined in TS 25.331 [16].

## 9.2.1.119a GANSS Time ID

This IE defines a particular GANSS system time.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Time ID	M		INTEGER(07 ,)	Defines the GANSS system time for the UTRAN GANSS Timing of Cell Frames for UE Positioning. Coded as defined in TS 25.331 [16], subclause 10.3.7.93a.

### 9.2.1.120 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 Reference	Semantics description
GANSS Transmission Time	М		9.2.1.122	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	М		INTEGER(0. .63)	Defined in TS 25.331 [16].
>SV Health	М		BIT STRING(5)	Coded as defined in OS SIS ICD [53].
>IOD	М		BIT STRING(10)	
>GANSS Clock Model	М		9.2.1.104	
>GANSS Orbit Model	М		9.2.1.107	
NOTE 1: The Non-Broadcast In broadcast by the satel applied to the navigati	lite. If it is set to	o 1, the UE is ir	nformed that tec	odel is not bit-to-bit the one hniques such as data wiping off

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.

## 9.2.1.120a 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		9.2.1.122	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 9.2.1.120.
Satellite Information		1 <maxga NSSSat&gt;</maxga 		
>Sat ID	Μ		INTEGER(0. .63)	Defined in TS 25.331 [16].
>SV Health	Μ		BIT STRING(6)	Coded as defined in TS 25.331 [16].
>IOD	М		BIT STRING(11)	Coded as defined in TS 25.331 [16].
>GANSS Additional Clock Models	М		GANSS I Clock Models 9.2.1.104a	
>GANSS Additional Orbit Models	М		GANSS Additional Orbit Models 9.2.1.107a	

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Range bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in this IE.
	The value of maxGANSSSat is 64.

## 9.2.1.121 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	Μ		INTEGER(07,)	Coded as defined in TS 25.331 [16].

### 9.2.1.122 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 <i>Requested Data Value</i> IE) modulo 8192 days (about 22 years).
GANSS TOD	Μ		INTEGER(0 86399)	GANSS Time of Day in seconds.

## 9.2.1.122a GANSS Earth Orientation Parameters

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
t <sub>EOP</sub>	Μ		BIT STRING(16)	EOP data reference time (seconds) (IS-GPS-200 [55]).
PM_X	M		BIT STRING (21)	X-axis polar motion value at reference time (arc-seconds) (IS-GPS-200 [55]).
PM_X_dot	М		BIT STRING (15)	X-axis polar motion drift at reference time (arc-seconds/day) (IS-GPS- 200 [55]).
PM_Y	М		BIT STRING (21)	Y-axis polar motion value at reference time (arc-seconds) (IS-GPS-200 [55]).
PM_Y_dot	М		BIT STRING (15)	Y-axis polar motion drift at reference time (arc-seconds/day) (IS-GPS- 200 [55]).
ΔUT1	М		BIT STRING (31)	UT1-UTC difference at reference time (seconds) (IS-GPS-200 [55]).
∆UT1_dot	М		BIT STRING (19)	Rate of UT1-UTC difference at reference time (seconds/day) (IS-GPS-200 [55]).

### 9.2.1.122b SBAS ID

This IE defines a specific SBAS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SBAS ID	Μ		ENUMERATED( WAAS, EGNOS, MSAS, GAGAN, )	

## 9.2.1.122c 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	Μ		INTEGER(0. .63)	Defined in TS 25.331 [16].
>>>Signals Available	Μ		BIT STRING(8)	Coded as defined in TS 25.331 [16].
>GANSS-ID-3				This choice may be present if GANSS ID indicated "GLONASS".
>>Aux Info List		1 <maxgan SSSat&gt;</maxgan 		
>>>Sat ID	М		INTEGER(0. .63)	Defined in TS 25.331 [16].
>>>Signals Available	М		BIT STRING(8)	Coded as defined in TS 25.331 [16].
>>>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 [60].

Range Bound	Explanation
maxGANSSSat	Maximum number of GANSS satellites for which data is included in this IE.

## 9.2.1.122d Additional Ionospheric Model Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional Ionospheric Model Request	М		BIT STRING(2)	Data ID for GANSS Additional lonospheric Model as defined in TS 25.331 [16], subclause 10.3.7.92b.

#### 9.2.1.122e Earth Orientation Parameters Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Earth Orientation Parameters Request	М		BOOLEAN	True means requested.

### 9.2.1.122f GANSS Additional Navigation Models And Time Recovery Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Additional Navigation Models And Time Recovery Request	М		BOOLEAN	True means requested.

## 9.2.1.122g GANSS Additional UTC Models Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Additional UTC Models Request	Μ		BOOLEAN	True means requested.

## 9.2.1.122h GANSS Auxiliary Information Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Auxiliary Information Request	М		BOOLEAN	True means requested.

## 9.2.1.123 SixtyfourQAM DL Support Indicator

The *SixtyfourQAM DL Support Indicator* indicates whether the particular cell is capable to support Sixtyfour QAM in DL or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixtyfourQAM DL Support Indicator			ENUMERAT ED (SixtyfourQA M DL Supported, SixtyfourQA M DL Not Supported)	

## 9.2.1.124 RANAP Enhanced Relocation Information Request

This parameter is transparent to the RNSAP. The parameter contains information for the Enhanced Relocation procedure as defined in TS 25.413 [2].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RANAP Enhanced Relocation Information Request			BIT STRING	The content is defined in TS 25.413 [2].

# 9.2.1.125 RANAP Enhanced Relocation Information Response

This parameter is transparent to the RNSAP. The parameter contains information for the Enhanced Relocation procedure as defined in TS 25.413 [2].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RANAP Enhanced Relocation Information Response			BIT STRING	The content is defined in TS 25.413 [2].

## 9.2.1.126 Released CN Domain

The parameter indicates the CD Domain(s) which the RNC shall release the related resource for.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Released CN Domain	М			
>PS Domain			NULL	
>CS Domain			NULL	
>PS and CS Domain			NULL	

# 9.2.1.127 Secondary CCPCH system information MBMS

The parameter contains information for the Secondary CCPCH system information MBMS as defined in TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Secondary CCPCH system information MBMS			BIT STRING	The content is defined in TS 25.331 [16].

# 9.2.1.128 MBSFN Cluster Identity

The parameter is the identifier of a MBSFN cluster in one PLMN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBSFN Cluster Identity			INTEGER (065535)	the identifier of a MBSFN cluster in one PLMN.

# 9.2.1.129 MBSFN Scheduling Transmission Time Interval

The parameter is the identifier of an MBSFN Scheduling Transmission Time Interval.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBSFN Scheduling			INTEGER	Number of TTIs.
Transmission Time Interval			(4,8,16,32,	
			64,128,256)	

## 9.2.1.130 MAC-ehs Reset Timer

The MAC-ehs Reset Timer IE is used as Reset Timer(Treset) described in TS 25.321 [41] subclause 11.6.4.5.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-ehs Reset Timer			ENUMERAT ED (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.

## 9.2.1.131 Enhanced FACH Support Indicator

This IE indicates the Enhanced FACH Support. [1.28Mcps TDD – This IE indicates the Enhanced FACH Support in both downlink and uplink.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced FACH Support Indicator			NULL	

# 9.2.1.132 Enhanced PCH Capability

This IE indicates the UE is capable of Enhanced PCH or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced PCH Capability			ENUMERAT	
			ED	
			(Enhanced	
			PCH	
			Capable,	
			Enhanced	
			PCH Not	
			Capable)	

# 9.2.1.133 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	Name Presence Range		IE Type and Reference	Semantics Description
Priority Queue Information		1 <maxnro fPrioQueue</maxnro 		
		S>		
>Priority Queue ID	Μ		9.2.1.45A	
>Scheduling Priority Indicator	Μ		9.2.1.51A	
>T1	М		9.2.1.54A	
>MAC-ehs Reset Timer	М		9.2.1.130	
>Discard Timer	0		9.2.1.19C	
>MAC-hs Window Size	М		9.2.1.34C	
>Maximum MAC-d PDU Size	Μ		MAC PDU	
			Size	
			Extended	
			9.2.1.34D	

Range Bound	Explanation
maxNrOfPrioQueues	Maximum number of Priority Queues.

## 9.2.1.134 MIMO Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Activation Indicator	М		NULL	

## 9.2.1.135 MIMO Mode Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Mode Indicator			ENUMERATED (Activate,	
			Deactivate)	

# 9.2.1.136 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 ,)	

# 9.2.1.137 UE Aggregate Maximum Bit Rate

The UE Aggregate Maximum Bitrate IE is applicable for all Non-GBR bearers per UE which is defined for the Downlink and the Uplink direction and provided by the CN to the RNC. At least one of the UE Aggregate Maximum Bit Rate Downlink IE and UE Aggregate Maximum Bit Rate Uplink IE shall be included in the UE Aggregate Maximum Bit Rate IE.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UE Aggregate Maximum Bit Rate				<b>Desc</b> : Applicable for non-GBR bearers.
>UE Aggregate Maximum Bit Rate Downlink	0		INTEGER (11,000,00 0,000)	<b>Desc.</b> : This IE indicates the aggregated maximum number of bits delivered by UTRAN and to UTRAN in DL within a period of time, divided by the duration of the period for all non-GBR bearers in one UE. The MBR of non-GBR bearers shall be ignored if this IE present.
>UE Aggregate Maximum Bit Rate Uplink	0		INTEGER (11,000,00 0,000)	<b>Desc.</b> : This IE indicates the aggregated maximum number of bits delivered by UTRAN and to UTRAN in UL within a period of time, divided by the duration of the period for all non-GBR bearers in one UE. The MBR of non-GBR bearers shall be ignored if this IE present.

# 9.2.1.138 DGNSS Validity Period

This IE defines the validity period of the GNSS differential corrections provided in *DGPS corrections* and *DGANSS corrections* IEs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UDRE Growth Rate	М		Enumerated( UDRE growth 1.5, UDRE growth 2, UDRE growth 4, UDRE growth 6, UDRE growth 8, UDRE growth 10, UDRE growth 12, UDRE growth 16)	This field provides an estimate of the growth rate of uncertainty $(1-\sigma)$ in the corrections. The UDRE at time value specified in the <i>Time</i> of <i>Validity for UDRE Growth Rate</i> <i>field</i> is the value of this field times the value of UDRE provided in DGPS Corrections or DGANSS corrections IE (TS 25.331 [16]).
Time of Validity for UDRE Growth Rate	М		Enumerated( val20sec, val40sec, val80sec, val160sec, val320sec, val640sec, val1280sec, val2560sec)	This field specifies the time when the UDRE Growth Rate field applies (TS 25.331 [16]).

# 9.2.1.139 MDT Configuration

The IE defines the MDT function parameters.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MDT Activation	M		ENUMERATED(MDT Only, MDT and Trace,)	
CHOICE MDT Area Scope	М			
>Cell based				
>>Cell ID List		1 to <maxnrofce IIIds&gt;</maxnrofce 		
>>>Cell-ID	М	INTEGER (02684354 55)		This information element identifies a cell uniquely within UTRAN and consists of RNC-ID and C-ID as defined in TS 25.401 [40].
>LA Based				
>>LAI List		1 to <maxnrofla Is&gt;</maxnrofla 		
>>>LAI	Μ			
>>>>PLMN Identity	M		OCTET STRING (3)	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler.</li> <li>bit 4 to 1 of octet n encoding digit 2n-1.</li> <li>bit 8 to 5 of octet n encoding digit 2n.</li> <li>The PLMN Identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>
>>>>LAC	М		OCTET STRING (2)	0000 and FFFE not allowed.
>RA Based				
>>RAI List		0 to <maxnrofr Als&gt;</maxnrofr 		
>>>RAI				This element identifies an area in which the MDT Configuration applies.
>>>PLMN Identity	M		OCTET STRING (3)	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler</li> <li>bit 4 to 1 of octet n encoding digit 2n-1</li> <li>bit 8 to 5 of octet n encoding digit 2n</li> <li>The PLMN Identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>
>>>LAC	М		OCTET STRING (2)	0000 and FFFE not allowed.
>>>RAC	M		OCTET STRING (1)	
>PLMN Area Based			NULL	

M1 Report	0	9.2.2.128	M1: FDD only CPICH RSCP and CPICH Ec/No measurement by UE. This information element shall not be sent, ignored if received.
M2 Report	0	9.2.3.83	M2: P-CCPCH RSCP and Timeslot ISCP for UTRA 1.28 TDD. This information element shall not be sent, ignored if received.
M3 Report	0	NULL	

Range bound	Explanation
maxNrOfCellIds	Maximum no. of Cell ID subject for MDT scope. Value is 32.
maxNrOfLAIs	Maximum no. of LAI subject for MDT scope. Value is 8.
maxNrOfRAIs	Maximum no of RAI subject for MDT scope. Value is 8.

## 9.2.1.140 MDT Report parameters

This IE defines the report parameters for MDT periodic reports.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MDT Report Parameters				
>Report interval	М		ENUMERATED (ms250, ms500, ms1000, ms2000, ms3000, ms4000, ms6000, ms12000, ms16000, ms20000, ms24000, ms32000, ms64000,)	This IE is defined in TS25.331[10].
>Report amount	М		ENUMERATED (1, 2, 4, 8, 16, 32, 64, infinity, )	

# 9.2.1.141 Neighbouring UMTS Cell Information Extension

The Neighbouring UMTS Cell Information Extension IE is an extension IE to the Neighbouring UMTS Cell Information IE and indicates the UMTS neigbouring cells in the same way as in the Neighbouring UMTS Cell Information IE. The DRNC may use the Neighbouring UMTS Cell Information Extension IE to indicate remaining UMTS neighbouring cells if the number of neighbouring RNCs exceeds the predefined maximum number of neighbouring RNCs (maxNrOfNeighbouringRNCs).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Neighbouring UMTS Cell Information Extension		1 <maxnr OfExtende dNeighbou ringRNCs&gt;</maxnr 	Kererence	
>RNC-ID	М		9.2.1.50	If the <i>Extended RNC-ID</i> IE is included in the <i>Neighbouring UMTS Cell Information</i> IE, the <i>RNC-ID</i> IE shall be ignored.
>CN PS Domain Identifier	0		9.2.1.12	
>CN CS Domain Identifier	0		9.2.1.11	
>Neighbouring FDD Cell Information	0		9.2.1.41B	
>Neighbouring TDD Cell Information	0		9.2.1.41D	
>Neighbouring TDD Cell Information LCR	0		9.2.1.72	
>Extended RNC-ID	0		9.2.1.50a	The <i>Extended RNC-ID</i> IE shall be used if the RNC identity has a value larger than 4095.

Range bound	Explanation
maxNrOfExtendedNeighbouringRNCs	Maximum number of extended neighbouring RNCs.

## 9.2.1.142 Source ID

The *Source ID* IE identifies the source for the relocation of SRNS. The Source ID shall be the SAI of the relocation source.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SAI	М		9.2.1.52	

# 9.2.1.143 Target ID

The *Target ID* IE identifies the target for the relocation of SRNS. The target ID shall be the Cell Global ID of the relocation target.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CGI	Μ		9.2.1.5D	

## 9.2.1.144 MS Classmark 2

The coding of this element is described in TS 24.008 [66].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MS Classmark 2	М		OCTET STRING	Coded same way as the Mobile Station Classmark 2 IE defined in TS 24.008 [66].

## 9.2.1.145 MS Classmark 3

The coding of this element is described in TS 24.008 [66].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MS Classmark 3	Μ		OCTET STRING	Coded same way as the <i>Mobile Station Classmark</i> 3 IE defined in TS 24.008 [66].

## 9.2.1.146 Speech Version

The Speech Version IE identifies the speech version supported.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Speech Version	М		BIT STRING (4)	The coding of this IE is described in TS 24.008 [66].

# 9.2.1.147 Controlled Object Scope

Controlled Object Scope IE indicates the scope of objects which the control of information transfer shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-ID	Μ		9.2.1.50	If the Extended RNC-ID IE is included, the RNC-ID IE shall be ignored.
Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.
Multiple PLMN List	0		9.2.1.117	
UMTS Cell Information	0	0 <maxnrofc ells&gt;</maxnrofc 		
>C-ID	М		9.2.1.6	

Range bound	Explanation
maxNrOfCells	Maximum number of cells that can be indicated in the
	corresponding IE.

# 9.2.1.148 ANR Report Indication

ANR Report Indication IE contains information about neighbour cells detected by the ANR function in UE and sent to the initiating RNC (RNC<sub>1</sub>) over Uu.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLMN Identity	Μ		OCTET STRING (3)	The registed PLMN of UE when the ANR result was logged. - digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler. - bit 4 to 1 of octet n encoding digit 2n-1. - bit 8 to 5 of octet n encoding digit 2n. -The PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).
L3 Information	М		9.2.1.32	The IE Contains UE INFORMATION RESPONSE defined in ref. TS 25.331 [16].

# 9.2.1.149 ANR Cell Information

The ANR Cell Information IE provides information about an UTRAN Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-ID	М		9.2.1.50	If the Extended RNC-ID IE is included in the ANR Cell Information IE, the RNC-ID IE shall be ignored.
LAC	0		OCTET STRING (2)	0000 and FFFE not allowed.
RAC	0		OCTET STRING (1)	
ANR FDD Cell Information	0		9.2.1.150	
ANR TDD Cell Information	0		9.2.1.151	
ANR TDD Cell Information	0		9.2.1.152	
Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.

## 9.2.1.150 ANR FDD Cell Information

The ANR FDD Cell Information IE provides information for FDD cell that is neighbouring cell to the Base UTRAN cell in ANR neighbouring relation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Power	0		9.2.1.44	
Tx Diversity Indicator	Μ		9.2.2.50	
STTD Support Indicator	0		9.2.2.45	
Closed Loop Mode1 Support Indicator	0		9.2.2.2	
Restriction State Indicator	0		9.2.1.48C	
DPC Mode Change Support Indicator	0		9.2.2.56	
Cell Capability Container FDD	0		9.2.2.D	
SNA Information	0		9.2.1.52Ca	
Frequency Band Indicator	0		9.2.2.59	
Max UE DTX Cycle	0		9.2.2.87	
ANR Multiple PLMN List	0		9.2.1.153	
Secondary Serving Cell List	0		9.2.2.101	
Dual Band Secondary Serving Cell List	0		Secondary Serving Cell List 9.2.2.101	
Cell Capability Container Extension FDD	0		9.2.2.123	

# 9.2.1.151 ANR TDD Cell Information

The ANR TDD Cell Information IE provides information for 3.84Mcps TDD or 7.68Mcps TDD cell that is neighbouring cell to the Base UTRAN cell in ANR neighbouring relation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Case	Μ		9.2.1.54	
Time Slot For SCH	0		Time Slot 9.2.1.56	
SCH Time Slot	0		9.2.1.51	
SCTD Indicator	М		9.2.1.78	
DPCH Constant Value	0		9.2.1.23	
PCCPCH Power	0		9.2.1.43	
Restriction State Indicator	0		9.2.1.48C	
Cell Capability Container TDD	0		9.2.3.1a	
Cell Capability Container 7.68Mcps TDD	0		9.2.3.31	
SNA Information	0		9.2.1.52Ca	
ANR Multiple PLMN List	0		9.2.1.153	

# 9.2.1.152 ANR TDD Cell Information LCR

The ANR TDD Cell Information LCR IE provides information for 1.28Mcps TDD cell that is neighbouring cell to the Base UTRAN cell in ANR neighbouring relation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCTD Indicator	Μ		9.2.1.78	
DPCH Constant Value	0		9.2.1.23	
PCCPCH Power	0		9.2.1.43	
Restriction State Indicator	0		9.2.1.48C	
Cell Capability Container TDD LCR	0		9.2.3.1b	
SNA Information	0		9.2.1.52Ca	
ANR Multiple PLMN List	0		9.2.1.153	
Cell Capability Container Extension TDD LCR	0		9.2.3.80	

## 9.2.1.153 ANR Multiple PLMN List

This information element contains a list of PLMN identities, which identifies the broadcasted PLMN Identities in MOCN and GWCN shared network configurations. The common PLMN Identify (mandatory PLMN Identity that is broascasted in the MIB) is not included in the list.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
List of PLMNs		1 <maxnrofbroadc astPLMNs&gt;</maxnrofbroadc 		
>PLMN Identity	М		OCTET STRING (SIZE (3))	<ul> <li>digits 0 to 9, two digits per octet,</li> <li>each digit encoded 0000 to 1001,</li> <li>1111 used as filler.</li> <li>bit 4 to 1 of octet n encoding digit 2n-1.</li> <li>bit 8 to 5 of octet n encoding digit 2n.</li> <li>The PLMN identity consists of 3 digits from MCC followed by either</li> <li>a filler plus 2 digits from MNC (in case of 2 digit MNC) or</li> <li>3 digits from MNC (in case of a 3 digit MNC).</li> </ul>

Range bound	Explanation
maxNrOfBroadcastPLMNs	Maximum number of additional PLMN identitys that can be broadcasted in a cell involved in a MOCN or GWCN Shared Network configuration. The value for maxNrOfBroadcastPLMNs is 5.

### 9.2.1.154 Extended RNTI

The Extended RNTI identifies the UE in the RNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended RNTI			INTEGER(1	
			048576419	
			4303,)	

## 9.2.1.155 Extended S-RNTI Group

The Extended S-RNTI Group identifies a group of UEs in the SRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended S-RNTI	М		9.2.1.154	
Extended S-RNTI bit mask	М		Enumerated(b1,	
index			b2,b21,)	

The Extended S-RNTI group is identified by all Extended S-RNTI values whose bits starting from the most significant bit down to, and including, the bit indicated by Extended S-RNTI bit mask index, are equal to the corresponding bits of the Extended S-RNTI in this IE.

The bits of the Extended S-RNTI in this IE that are less significant than the bit position indicated by the Extended S-RNTI bit mask index shall be ignored.

# 9.2.1.156 Common E-RGCH Cell Information

The Common E-RGCH Cell Information IE provides information about a Common E-RGCH capable cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Common RG Activation State	М				Ι	
>De-Activation					-	
>>De-Activation	Μ		NULL		_	
>Activation					_	
>>E-RGCH Channelisation Code	Μ		FDD DL Channelisat ion Code Number 9.2.2.14	E-RGCH Channelisatio n Code	-	
>>E-RGCH Signature Sequence	M		INTEGER (0maxnoof SigSeqE- RGHICH - 1)	E-RGCH Signature Sequence	_	
>>Minimum Serving Grant	0	INTEGER (037,38)	(037) indicates E- DCH serving grant index as defined in TS 25.321 [41]; index 38 means zero grant	Minimum Serving Grant	_	

# 9.2.2 FDD Specific Parameters

This subclause contains parameters that are specific to FDD.

# 9.2.2.a ACK-NACK Repetition Factor

The ACK-NACK Repetition Factor IE indicates the consecutive repetition of the ACK and NACK.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
ACK-NACK Repetition			INTEGER	Step: 1.
Factor			(1,4,)	

# 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 TS 25.213 [21] 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 TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CM Configuration Change CFN	М		CFN 9.2.1.9	•	-	
Transmission Gap Pattern Sequence Status		0 <maxtgp S&gt;</maxtgp 		If the group is not present, none of the pattern sequences are activated.	-	
>TGPSI Identifier	М		INTEGER(1< MaxTGPS>)	Establish a reference to the compressed mode pattern sequence. Up to <maxtgps> simultaneous compressed mode pattern sequences can be activated.</maxtgps>	-	
>TGPRC	Μ		INTEGER(05 11)	The number of transmission gap patterns within the Transmission Gap Pattern Sequence. 0=Infinity.	-	
>TGCFN	М		CFN 9.2.1.9	Connection Frame Number of the first frame of the first pattern 1 within the Transmission Gap Pattern Sequence.	-	
>Affected HS- DSCH serving cell List		0 <maxnr OfHSDSC H&gt;</maxnr 		The HS-DSCH serving cells affected by the TGPS when activating frequency specific compressed mode. Max 4 in this 3GPP release.	EACH	reject
>>C-ID	М		9.2.1.6		-	

Range bound	Explanation
maxTGPS	Maximum number of active pattern sequences. Value 6.
maxNrOfHSDSCH	Maximum number of Primary Serving plus Secondary Serving HS- DSCH cells for one UE.

# 9.2.2.B Adjustment Period

Adjustment Period IE defines the period to be used for power balancing.

	IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adju	stment Period			INTEGER (1 256)	Unit: Frames.

## 9.2.2.C Adjustment Ratio

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 (0 100)	The Adjustment Ratio is given with a granularity of 0.01 0 -> 0.00 1 -> 0.01  100 -> 1.00

## 9.2.2.Ca Bundling Mode Indicator

The Bundling Mode Indicator indicates whether the bundling shall be done or shall not be done for Iur.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Bundling Mode Indicator			ENUMERATED ( Bundling, No bundling)	The value "Bundling" is applicable only when E-TTI indicates "2ms".

# 9.2.2.D Cell Capability Container FDD

The Cell Capability Container FDD indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container			BIT STRING	Each bit indicates whether a
FDD			(32)	cell supports a particular
			(0=)	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:Reserved.
				The second bit: Delayed
				Activation Support Indicator.
				The third bit: HS-DSCH
				Support Indicator.
				The fourth bit:Reserved.
				The fifth bit: F-DPCH
				Support Indicator.
				The sixth bit: E-DCH Support
				Indicator.
				The seventh bit: E-DCH
				TTI2ms Support Indicator.
				The eighth bit: E-DCH
				2sf2and2sf4 and all inferior
				SFs Support Indicator.
				The ninth bit: E-DCH 2sf2
				and all inferior SFs Support
				Indicator.
				The tenth bit: E-DCH 2sf4
				and all inferior SFs Support
				Indicator.
				The eleventh bit: E-DCH sf4
				and all inferior SFs Support
				Indicator.
				The twelveth bit: E-DCH sf8
				and all inferior SFs Support
				Indicator.
				The thirteenth bit: E-DCH
				HARQ IR Combining
				Support Indicator.
				The fourteenth bit: E-DCH
				HARQ Chase Combining
				Support Indicator.
				The fifteenth bit: Continuous
				Packet Connectivity DTX-
				DRX Support Indicator.
				The sixteenth bit: Continuous
				Packet Connectivity HS-
				SCCH less Support
				Indicator.
				The seventeenth bit: MIMO
				Support Indicator.
				The eighteenth bit: SixteenQAM UL Support
				Indicator.
				The nineteenth bit: Flexible
				MAC-d PDU Size Support
				Indicator.
				The twentieth bit: F-DPCH
				Slot Format Support
				Indicator.
				The twentyfirst bit:
				SixtyfourQAM DL Support
				Indicator.
				The twentysecond bit:
L			1	

	Flexible E-DCH MAC-d PDU Size Support Indicator. The twentythird bit: E- DPCCH Power Boosting Support Indicator. The twentytfourth bit: SixtyfourQAM DL and MIMO Combined Support Indicator. This bit shall not be set to 1 if SixtyfourQAM DL Support Indicator is set to 0 or MIMO Support Indicator is set to 0. The twentyfifth bit: Multi Cell Support Indicator. The twentysixth bit: MBMS Support Indicator. The twentyseventh bit: TX Diversity on DL Control Channels by MIMO Capable UE when MIMO operation is Active Support Indicator. The twentyeighth bit: Dual Band Support Indicator The twentyninth bit: Single Stream MIMO Support Indicator. The thirtieth bit: Preferred Precoding Weight Set Restriction Support Indicator. (See TS 25.331 [16], the value 1 indicates
	preferred) 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.E Cell Portion ID

Cell Portion ID is the unique identifier for a cell portion within a cell. See TS 25.215 [11].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Portion ID			INTEGER (063,)	

# 9.2.2.1 Chip Offset

The Chip Offset is defined as the radio timing offset inside a radio frame. The Chip Offset is used as offset for the DL DPCH 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.

# 9.2.2.2 Closed Loop Mode1 Support Indicator

The Closed Loop Mode1 Support Indicator indicates whether the particular cell is capable to support Closed loop mode1 or not

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Closed Loop Mode1 Support			ENUMERAT	
Indicator			ED(Closed	
			loop mode1	
			Supported,	
			Closed loop	
			mode1 not	
			supported).	

## 9.2.2.3 Closed Loop Mode2 Support Indicator

Void.

# 9.2.2.3A 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	Semantics Description
			Reference	
Closed Loop Timing Adjustment Mode			ENUMERAT ED(Offset1, Offset2,)	According to TS 25.214 [10] subclause 7.1: Offset1 = slot(j+1)mod15 Offset2 = slot(j+2)mod15

# 9.2.2.4 Compressed Mode Method

Void

# 9.2.2.4A 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 <maxnr OfDCHs&gt;</maxnr 			_	
>Payload CRC Presence Indicator	М		9.2.1.42		_	
>UL FP Mode	М		9.2.1.67		_	
>ToAWS	М		9.2.1.58		_	
>ToAWE	М		9.2.1.57		_	
>DCH Specific Info		1 <maxnr OfDCHs&gt;</maxnr 			_	
>>DCH ID	М		9.2.1.16		_	
>>TrCH Source Statistics Descriptor	М		9.2.1.65		_	
>>Transport Format Set	М		9.2.1.64	For the UL.	_	
>>Transport Format Set	М		9.2.1.64	For the DL.	_	
>>BLER	М		9.2.1.4	For the UL.	_	
>>BLER	М		9.2.1.4	For the DL.	_	
>>Allocation/Retention Priority	М		9.2.1.1		_	
>>Frame Handling Priority	М		9.2.1.29		_	
>>QE-Selector	М		9.2.1.46A		_	
>>DRAC control	М		9.2.2.13		_	
>Guaranteed Rate Information	0		9.2.1.30M		YES	ignore
>>Traffic Class	М		9.2.1.58A		YES	ignore
>>Unidirectional DCH Indicator	0		9.2.1.68B		YES	reject
>TNL QoS	0		9.2.1.56A		YES	ignore

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

# 9.2.2.4B 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		9.2.2.4MC		-	
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40	If this IE is not included, scheduled transmission in all HARQ processes is allowed.	_	
E-DCH Maximum Bitrate	0		9.2.2.4MG		_	
E-DCH Processing Overload Level	0		9.2.1.95		_	
E-DCH Reference Power Offset	0		9.2.2.4MI		-	
E-DCH Power Offset for Scheduling Info	0		9.2.1.96		YES	ignore
SixteenQAM UL Operation Indicator	0		9.2.2.90		YES	reject
E-AGCH Table Choice	C- SixteenQA M UL Operation		9.2.2.61A	If the SixteenQAM UL operation is not configured for this UE, Table 16B for E- AGCH in TS 25.212 [9] shall be used.	YES	ignore
SixtyfourQAM UL Operation Indicator	0		9.2.2.90a		YES	reject
UL MIMO Information	0		9.2.2.159		YES	reject

Condition	Explanation
SixteenQAM UL Operation	The IE shall be present if the SixteenQAM UL Operation Indicator IE is
	set to "Activate".

# 9.2.2.4C 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 DRNS.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
E-DCH MAC-d Flow Specific Information Response		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 			_	
>E-DCH MAC-d Flow ID	М		9.2.1.91	If only HARQ Process Allocation For 2ms Scheduled Transmissio n Grant IE and this IE (E-DCH MAC-d Flow ID) are present in the E-DCH FDD Information Response IE, the content of this IE shall be considered invalid.	_	
>Binding ID	0		9.2.1.3		_	
>Transport Layer Address	0		9.2.1.62		_	
>HARQ Process Allocation For 2ms Non- Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40		_	
>Transport Bearer Not Setup Indicator	0		9.2.2.4T		YES	ignore
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40		_	

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.2.2.4D 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 9.2.2.11	Scrambling code on which E-AGCH, E- RGCH and E- HICH are transmitted. 0= Primary scrambling code of the cell 115 = Secondary scrambling code.	_	
E-AGCH Channelisation Code	0		FDD DL Channelisat ion Code Number 9.2.2.14		_	
Primary E-RNTI	0		E-RNTI 9.2.1.94		-	
Secondary E-RNTI	0		E-RNTI 9.2.1.94		-	
E-RGCH/E-HICH Channelisation Code	М		FDD DL Channelisat ion Code Number 9.2.2.14		_	
E-RGCH Signature Sequence	0		INTEGER (0maxnoof SigSeqERG HICH-1)		_	
E-HICH Signature Sequence	0		INTEGER (0maxnoof SigSeqERG HICH-1)		_	
Serving Grant Value	0		INTEGER (037,38)	(037) indicates E- DCH serving grant index as defined in TS 25.321 [41]; index 38 means zero grant.	-	
Primary/Secondary Grant Selector	0		ENUMERA TED (Primary, Secondary)	Indicates whether the Serving Grant Value is granted with a primary E- RNTI or a secondary E- RNTI.	_	
E-RGCH Release Indicator	0		9.2.2.60		_	
E-RGCH and E-HICH Channelisation Code Validity Indicator	0		9.2.2.68	Indicates whether the value of E- RGCH and E- HICH Channelisatio n Code is invalid.	YES	ignore
Default Serving Grant in	0		INTEGER	Serving Grant	YES	ignore

DTX Cycle 2			37,38)	value to be used in DTX- Cycle-2. (037) indicates E- DCH serving grant index as defined in TS 25.425 [32]; index 38 means zero grant.		
UL MIMO DL Control Channel information	0	9.:	2.2.162		YES	ignore

Range bound	Explanation
maxnoofSigSeqERGHICH	Maximum number Signature Sequences for E-RGCH
	/ E-HICH.

# 9.2.2.4E 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			ENUMERAT	
			ED(E-DCH,	
			non E-DCH)	

# 9.2.2.4F E-DCH FDD Information To Modify

The E-DCH FDD Information IE provides information for an E-DCH to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 		See Note1 below.	_	
>E-DCH MAC-d Flow ID	М		9.2.1.91		-	
>Allocation/Retention Priority	0		9.2.1.1		_	
>Transport Bearer Request Indicator	М		9.2.1.61		_	
>TNL QoS	0		9.2.1.56A		_	
>Maximum Number of Retransmissions for E- DCH	0		9.2.1.100		I	
>Traffic Class	0		9.2.1.58A		_	
>E-DCH HARQ Power Offset FDD	0		9.2.2.4L		_	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89		-	
> CHOICE <i>E-DCH grant</i> type	0					
>>E-DCH Non- Scheduled Transmission Grant						
>>>Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	M		9.2.2.4N	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 9.2.2.40		_	

>>>Extended Maximum Number of Bits per MAC-e PDU for Non- scheduled Transmission	0	9.2.2.4R	When Maximum MAC-d PDU Size Extended IE is configured for an E-DCH Logical Channel this IE indicates the extended maximum	YES	reject
			per MAC-I PDU.		

	1	1	KU U I			
>>E-DCH Scheduled			NULL			
Transmission Grant	0		9.2.2.Ca			
>Bundling Mode Indicator	0		E-DCH		_	
>E-DCH Logical Channel To Add	0		Logical		_	
TO Add			Channel			
			Information			
			9.2.1.92			
>E-DCH Logical Channel			9.2.1.93		_	
To Modify			0.2.1.00			
>E-DCH Logical Channel		0<			_	
To Delete		maxNoOfL				
		ogicalCha				
		nnels>				
>>Logical Channel ID	Μ		9.2.1.97		_	
HARQ Process Allocation	0		HARQ		_	
For 2ms Scheduled			Process			
Transmission Grant			Allocation			
			for 2ms TTI			
			9.2.2.40			
E-DCH Maximum Bitrate	0		9.2.2.4MG		-	
E-DCH Processing Overload	0		9.2.1.95		_	
E-DCH Reference Power	0		9.2.2.4MI		_	
Offset						
MAC-e Reset Indicator	0		9.2.1.99		_	
E-DCH Power Offset for	0		9.2.1.96		YES	ignore
Scheduling Info						-
SixteenQAM UL Operation Indicator	0		9.2.2.90		YES	reject
E-DCH MAC-d PDU Size	0		9.2.1.91A		YES	reject
Format			0.2			
E-DCH DL Control Channel		0 <maxnr< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></maxnr<>			GLOBAL	ignore
Grant Information		OfEDCHR				5
		Ls>				
>E-DCH RL ID	Μ		RL ID		-	
			9.2.1.49			
E-AGCH Table Choice	C-		9.2.2.61A	If sixteenQAM	YES	ignore
	SixteenQA			UL operation		
	MUL			is not used in		
	Operation			the new		
				configuration		
				for this UE,		
				Table 16B for		
				E-AGCH in TS		
				25.212 [9]		
				shall be used in the new		
				configuration.		
SixtyfourQAM UL Operation	0		9.2.2.90a		YES	reject
Indicator						
UL MIMO Reconfiguration	0		9.2.2.158		YES	reject
Note 1: Even if no E-DCH N						
Information shall be				MAC-d Flow ID IE	and the Transp	bort
BearerRequest Indi		Dearer not h	requesiea .			

Condition	Explanation
SixteenQAM UL Operation	The IE shall be present if the SixteenQAM UL Operation Indicator IE
	is set to "Activate".

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
MaxNoOfLogicalChannels	Maximum number of Logical Channels.
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.

# 9.2.2.4G E-DCH Transport Format Combination Set Information (E-TFCS Information)

Whereas the related Transport Block sizes are standardised in TS 25.321 [41] 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 TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
E-TFCI Table Index	М		INTEGER (01,, 27)	Indicates which standardised E-TFCS Transport Block Size	_	
				Table shall be used. The related tables are specified in TS 25.321 [41].		
E-DCH Minimum Set E- TFCI	М		INTEGER (0127)	For the concept of "E- DCH Minimum Set of TFCs" see TS 25.321 [41] and TS 25.331 [16].	_	
Reference E-TFCI Information		1 <maxnr OfRefETF Cls&gt;</maxnr 			-	
>Reference E-TFCI	М		INTEGER (0127)		_	
>Reference E-TFCI Power Offset	М		9.2.2.4P	If the Extended Reference E- TFCI Power Offset IE is present, this IE shall be ignored.	_	
>Extended Reference E- TFCI Power Offset	0		9.2.2.4Q		YES	reject
E-DCH Minimum Set E- TFCI Validity Indicator	0		9.2.2.69	Indicates whether the value of E- DCH Minimum Set E-TFCI is invalid.	YES	reject
E-TFCI Boost Information	0		9.2.2.91		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 TS 25.214 [10].	YES	reject

Range Bound	Explanation
maxNrOfRefETFCIs	Maximum number of signalled reference E-TFCIs.

# 9.2.2.4J 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			ENUMERAT	
			ED (2ms,	
			10ms)	

## 9.2.2.4K E-DPCCH Power Offset

The E-DPCCH Power Offset is used to calculate the E-DPCCH gain factor  $\beta_{ec}$  as defined in TS 25.214 [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 TS 25.213 [21] subclause 4.2.1.3.

## 9.2.2.4KA Void

## 9.2.2.4L 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 TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH HARQ Power Offset FDD			INTEGER (06)	According to mapping in TS 25.213 [21] subclause 4.2.1.3.

- 9.2.2.4M Void
- 9.2.2.4MA Void
- 9.2.2.4MB Void
- 9.2.2.4MC 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 <maxnr OfEDCHM ACdFlows &gt;</maxnr 	Reference		_	
>E-DCH MAC-d Flow ID	М	-	9.2.1.91		_	
>Allocation/Retention Priority	0		9.2.1.1		1	
>TNL QoS	0		9.2.1.56A		-	
>Payload CRC Presence Indicator	М		9.2.1.42		-	
>Maximum Number of Retransmissions for E- DCH	Μ		9.2.1.100		_	
>Traffic Class	М		9.2.1.58A		-	
>E-DCH HARQ Power Offset FDD	М		9.2.2.4L		_	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89		_	
>CHOICE <i>E-DCH grant</i> <i>type</i>	М				_	
>>E-DCH Non- Scheduled Transmission Grant						
>>>Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	M		9.2.2.4N	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 9.2.2.4O	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	2.2.4R	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		NU	ILL			
>Bundling Mode Indicator	0	9.2	2.2.Ca		-	
>E-DCH Logical Channel Information	М	9.2	2.1.92		-	
<ul> <li>&gt;TrCH Source Statistics</li> <li>Descriptor</li> </ul>	0	9.2	2.1.65		YES	ignore

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

- 9.2.2.4MD Void
- 9.2.2.4ME Void
- 9.2.2.4MF Void

#### 9.2.2.4MG 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, 1149934507)	Bitrate on transport block level. Unit is kbits per second.

## 9.2.2.4MH Void

#### 9.2.2.4MI 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 TS 25.213 [21] subclause 4.2.1.3.

## 9.2.2.4MJ Void

#### 9.2.2.4N 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 maximum numbers 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 DRNS, the *Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission* IE is *Non-scheduled Transmission* IE shall be used to represent the value to be sent to the DRNS, see section 9.2.2.4R.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of Bits per MAC-e PDU for Non-			INTEGER (119982)	
Scheduled Transmission				

## 9.2.2.40 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 TS 25.321 [41], chapter 11.8.1.3.

## 9.2.2.4P 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 TS 25.214 [10]. If the range of the *Reference E-TFCI Power Offset* IE is insufficient to represent the value to be sent to the DRNS, the *Extended Reference E-TFCI Power Offset* IE shall be used to represent the value to be sent to the DRNS, see section 9.2.2.4Q.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference E-TFCI Power Offset			INTEGER (029)	According to mapping in TS 25.213 [21] subclause 4.2.1.3

## 9.2.2.4Q 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 9.2.2.4P) is insufficient to represent the value of the Reference E-TFCI Power Offset to be sent to the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Reference E-TFCI Power Offset			INTEGER (3031,)	According to mapping in TS 25.213 [21] subclause 4.2.1.3.

# 9.2.2.4R 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 9.2.2.4N) 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 DRNS.

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			2297934507)	

## 9.2.2.4S 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 DCH or an E-DCH MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Not			ENUMERATED	
Requested Indicator			(Transport Bearer	
-			shall not be	
			Established,	
			Transport Bearer	
			may not be	
			Established)	

## 9.2.2.4T 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 Diversity Control Field

Void.

9.2.2.7 Diversity Indication

Void.

#### 9.2.2.8 Diversity Mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Mode			ENUMERAT ED(None,	The <i>Diversity Mode</i> IE shall never be set to "Not Used". If
			STTD,	received it shall be rejected.
			Closed loop	
			mode 1, Not	
			Used,)	

# 9.2.2.9 DL DPCH Slot Format

Indicates the slot format used in DPCH in DL, according to TS 25.211 [8].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Slot Format			INTEGER (016,)	

# 9.2.2.9A 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 DRNS. 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			ENUMERAT ED(timing	The size of the timing adjustment is 256 chips.
			advance, timing delay)	

## 9.2.2.10 DL Power

Void

# 9.2.2.10A 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	Criticality	Assigned Criticality
Power Adjustment Type	М		9.2.2.28		_	
DL Reference Power	C-Common		DL power 9.2.1.21A	Power on DPCH or on F-DPCH.	_	
DL Reference Power Information	C-Individual	1 <maxnro fRLs&gt;</maxnro 			-	
>RL ID	М		9.2.1.49		-	
>DL Reference Power	М		DL power 9.2.1.21A	Power on DPCH or on F-DPCH.	_	
Max Adjustment Step	C- CommonOrIn dividual		9.2.2.23		_	
Adjustment Period	C- CommonOrIn dividual		9.2.2.B		_	
Adjustment Ratio	C- CommonOrIn dividual		9.2.2.C		_	

Condition	Explanation
Common	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Common".
Individual	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Individual".
CommonOrIndividual	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Common" or "Individual".

Range Bound	Explanation
maxNrOfRLs	Maximum number of Radio Links for a UE.

## 9.2.2.10B 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			ENUMERATED(DL	
Activation Indicator			Power Balancing	
			Activated).	

## 9.2.2.10C DL Reference Power Information

The *DL Reference Power Information* IE provides reference power of the power balancing to be used in the relevant RL(s).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Common DL Reference Power	0		DL power 9.2.1.21A	Power on DPCH or on F-DPCH.	-	
Individual DL Reference Power Information		0 <maxnro fRLs&gt;</maxnro 			-	
>RL ID	Μ		9.2.1.49		-	
>DL Reference Power	М		DL power 9.2.1.21A	Power on DPCH or on F-DPCH.	_	

Range bound	Explanation		
maxNrOfRLs	Maximum number of RLs for a UE.		

# 9.2.2.10D 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			ENUMERATED(DL	
Updated Indicator			Power Balancing	
			Updated).	

# 9.2.2.11 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. 115= Secondary scrambling code.

# 9.2.2.12 Downlink Frame Type

Void

# 9.2.2.12A DPC Mode

The DPC Mode IE indicates the DPC mode to be applied TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPC Mode			ENUMERAT TED (Mode0, Mode1, )	Mode0: The DRNS shall estimate the UE transmitted TPC command and update the DL power in every slot. Mode1: The DRNS shall estimate the UE transmitted TPC command over three slots and shall update the DL power in every three slots.

# 9.2.2.13 DRAC Control

The possibility to use DRAC control has been removed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DRAC Control			ENUMERAT ED (Not Used, Not- Requested)	The DRAC Control IE shall never be set to "Not Used".

#### 9.2.2.13A DSCH FDD Information

Void.

## 9.2.2.13B DSCH FDD Information Response

Void.

#### 9.2.2.13Bb DSCH-RNTI

Void.

## 9.2.2.13C FDD DCHs To Modify

The FDD DCHs To Modify IE provides information for DCHs to be modified.

IE/Group Name			IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
FDD DCHs To Modify					_	
>UL FP Mode	0		9.2.1.67		_	
>ToAWS	0		9.2.1.58		_	
>ToAWE	0		9.2.1.57		_	
>Transport Bearer Request Indicator	M		9.2.1.61		-	
>DCH Specific Info		1 <maxnr OfDCHs&gt;</maxnr 			_	
>>DCH ID	М		9.2.1.16		_	
>>Transport Format Set	0		9.2.1.64	For the UL.	-	
>>Transport Format Set	0		9.2.1.64	For the DL.	-	
>Allocation/Retention Priority	0		9.2.1.1		-	
>>Frame Handling Priority	0		9.2.1.29		_	
>>Not Used	0		NULL		_	
>Suaranteed Rate Information	0		9.2.1.30M		YES	ignore
>>Traffic Class	0		9.2.1.58A		YES	ignore
>>Unidirectional DCH Indicator	0		9.2.1.68B		YES	reject
>TNL QoS	0		9.2.1.56A		YES	ignore

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

#### 9.2.2.13D Enhanced DSCH PC

Void.

9.2.2.13E Enhanced DSCH PC Counter

Void.

9.2.2.13F Enhanced DSCH PC Indicator

Void.

9.2.2.13G Enhanced DSCH PC Wnd

Void.

#### 9.2.2.13H Enhanced DSCH Power Offset

Void.

#### 9.2.2.13I Enhanced Primary CPICH Ec/No

Energy per PN chip divided by the total received power spectral density measured on the Primary CPICH by the UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced Primary CPICH Ec/No			INTEGER(0. .49)	According to the mapping of the Primary CPICH Ec/lo UE measurement defined in TS 25.133 [23] and TS 25.123 [24].

#### 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(0. . 511)	According to the mapping in TS 25.213 [27]. 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 FDD DL Code information for all DPCHs or for the F-DPCH of one Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
FDD DL Code Information		1 <maxnrof DL-Codes</maxnrof 			-	
>DL Scrambling Code	М		9.2.2.11		_	
>FDD DL Channelisation Code Number	М		9.2.2.14		_	
<ul> <li>Transmission Gap Pattern</li> <li>Sequence Scrambling Code</li> <li>Information</li> </ul>	0		9.2.2.47B		_	

Range bound	Explanation
maxNrOfDL-Codes	Maximum number of DL Channelisation Codes for
	one UE.

## 9.2.2.15 FDD S-CCPCH Offset

Void.

#### 9.2.2.16 FDD TPC Downlink 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			ENUMERAT	
Size			ED(0.5, 1,	
			1.5, 2,)	

## 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			ENUMERAT	
			ED(first RLS,	
			not first RLS)	

#### 9.2.2.17 Gap Position Mode

Void.

9.2.2.18 Gap Period (TGP)

Void.

### 9.2.2.19 Gap Starting Slot Number (SN)

Void

## 9.2.2.19a HS-DSCH FDD Information

The HS-DSCH FDD Information IE is used for initial addition of HS-DSCH information to UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flows Information	М		9.2.1.30OA		_	
UE Capabilities Information		1			_	
>HS-DSCH Physical	М		9.2.1.30Oa		-	
Layer Category >1.28 Mcps TDD uplink	0		9.2.3.10D	Not to be	YES	ignore
physical channel capability >Number of Supported Carriers	0		ENUMERATE D ( One-one carrier, One- three carrier, Three-three carrier, One- six carrier, Tree-six carrier, Six-six carrier, Six-six carrier, Discontiguous, Two-Two carrier Discontiguous, One- Twocarrier Contiguous, Two-Two carrier	used. Not to be used.	YES	reject
>MIMO SF Mode Supported For HS-PDSCH	0		Contiguous) ENUMERATE D (SF1,	Not to be used.	YES	ignore
dual stream Multi-carrier HS-DSCH	0		SF1/SF16) 9.2.1.30Oa	Not to be	YES	ignore
Physical Layer Category >UE TS0 Capability LCR	0		ENUMERATE D (TS0 Capable, TS0	used. Not to be used.	YES	ignore
>UE RF Band Capability LCR	C- NofSupport edCarriers		Non-Capable) 9.2.3.84	Not to be used.	YES	ignore
MAC-hs Reordering Buffer Size for RLC-UM	М		9.2.1.34Ab		_	
CQI Feedback Cycle k	М		9.2.2.24a			
CQI Repetition Factor	C- CQICyclek		9.2.2.24c		-	
ACK-NACK Repetition Factor	M		9.2.2.a		_	
CQI Power Offset	М		9.2.2.24b		_	
ACK Power Offset	M		9.2.2.b		_	
NACK Power Offset	M		9.2.2.26a			
HS-SCCH Power Offset	0		9.2.2.19d			
HARQ Preamble Mode	0		9.2.2.57		YES	ignore
MIMO Activation Indicator	0		9.2.1.134		YES	reject
HS-DSCH MAC-d PDU Size Format	0		9.2.1.30OC	If not present, "Indexed MAC-d PDU Size" shall be used.	YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A		YES	ignore
UE with enhanced HS- SCCH support indicator	0		NULL	UE supports enhanced HS-	YES	ignore

			SCCH functionality: - UE supports different HS- SCCH in consecutive TTIs and, - in HS-SCCH- less operation mode the UE supports HS- SCCH orders.		
Enhanced HS Serving CC Abort	0	ENUMERATE D (Abort Enhanced HS Serving CC, )	Shall be ignored in Radio Link Setup and Radio Link Addition procedures.	YES	reject
UE Support Indicator Extension	0	9.2.2.103		YES	ignore
Power Offset For S-CPICH for MIMO Request Indicator	0	9.2.2.105		YES	ignore
Single Stream MIMO Activation Indicator	0	9.2.2.106		YES	reject
MIMO with four transmit antennas Activation Indicator	0	9.2.2.145		YES	reject
Dual Stream MIMO with four transmit antennas Activation Indicator	0	9.2.2.149		YES	reject
Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator	0	9.2.2.147		YES	ignore
Multiflow Information	0	9.2.2.152	For FDD only	YES	reject

Condition	Explanation
CQICyclek	The IE shall be present if the CQI Feedback Cycle k IE is set to
	a value greater than 0.

## 9.2.2.19aa 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 UE 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		9.2.2.19d		_	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A		-	
MIMO Activation Indicator	0		9.2.1.134		YES	reject
Single Stream MIMO	0		9.2.2.106		YES	reject
Activation Indicator Diversity Mode	0		9.2.2.8	If Diversity mode = "Closed loop mode 1" the procedure shall be rejected.	YES	reject
Transmit Diversity Indicator	0		9.2.2.48		YES	reject
Power Offset For S-CPICH for MIMO Request Indicator	0		9.2.2.105		YES	ignore
Ordinal Number Of Frequency	0		INTEGER (132,)	Value = "1" indicates 1st secondary serving HS- DSCH cell, Value = "2" indicates 2nd secondary serving HS- DSCH cell etc. TS 25.214 [10]. The IE shall be ignored by the DRNS if the new configuration contains one secondary serving radio link.	YES	reject
MIMO with four transmit antennas Activation Indicator	0		9.2.2.145		YES	reject
Dual Stream MIMO with four transmit antennas Activation Indicator	0		9.2.2.149		YES	reject
Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147		YES	ignore
Multiflow Ordinal Number Of Frequency	0		INTEGER (132,)	In intra-Node B multiflow case, the Value specifies the index of the secondary serving or assisting serving or assisting secondary serving HS- DSCH cell for the UL HS-DPCCH as specified in TS 25.212. In inter-Node B multiflow	YES	reject

	case, if present, the Value must be "1".	
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#### 9.2.2.19b HS-DSCH FDD Information Response

The *HS-DSCH FDD Information Response* IE provides information for HS-DSCH MAC-d flows that have been established or modified. It also provides additional HS-DSCH information determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information Response		0 <max NrOfMA CdFlow s&gt;</max 			-	
>HS-DSCH MAC-d Flow ID	М		9.2.1.300		-	
>Binding ID	0		9.2.1.3		_	
>Transport Layer Address	0		9.2.1.62		_	
>HS-DSCH Initial Capacity Allocation	0		9.2.1.30Na		_	
HS-SCCH Specific Information Response		0 <max NrOfHS SCCHC odes&gt;</max 			-	
>Code Number	М		INTEGER (0127)		-	
HS-PDSCH And HS- SCCH Scrambling Code	0		DL Scrambling Code 9.2.2.11		-	
Measurement Power Offset	0		9.2.2.24d		-	
HARQ Memory Partitioning	0		9.2.1.116		-	
User Plane Congestion Fields Inclusion	0		9.2.1.70C		YES	ignore
HARQ Preamble Mode Activation Indicator	0		9.2.2.58		YES	ignore
MIMO Information Response	0		9.2.2.78		YES	Ignore
SixtyfourQAM DL Usage Indicator	0		9.2.2.79B		YES	Ignore
HS-DSCH TB Size Table Indicator	0		9.2.2.19G		YES	ignore
Power Offset For S- CPICH for MIMO	0		9.2.2.104		YES	ignore
Support of dynamic DTXDRX related HS- SCCH order	0		9.2.2.129		YES	ignore
Power Offset For S- CPICH for MIMO with four transmit antennas	0		9.2.2.148		YES	ignore

Range bound	Explanation
maxNrOfMACdFlows	Maximum number of MAC-d flows.
maxNrOfHSSCCHCodes	Maximum number of HS-SCCH codes.

## 9.2.2.19ba HS-DSCH FDD Secondary Serving Information Response

The *HS-DSCH FDD Secondary Serving Information Response* IE provides Secondary Serving HS-DSCH information determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Specific Secondary Serving Information Response		0 <maxn rOfHSSC CHCodes &gt;</maxn 			_	
>Code Number	М		INTEGER (0127)		-	
HS-PDSCH And HS- SCCH Scrambling Code	0		DL Scrambling Code 9.2.2.11		-	
Measurement Power Offset	0		9.2.2.24d		_	
SixtyfourQAM DL Usage Indicator	0		9.2.2.79B		_	
HS-DSCH TB Size Table Indicator	0		9.2.2.19G		_	
MIMO Information Response	0		9.2.2.78		YES	ignore
Power Offset For S- CPICH for MIMO	0		9.2.2.104		YES	ignore
Power Offset For S- CPICH for MIMO with four transmit antennas	0		9.2.2.148		YES	ignore

Range bound	Explanation
maxNrOfHSSCCHCodes	Maximum number of HS-SCCH codes.

## 9.2.2.19bb 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 UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Power Offset	0		9.2.2.19d		_	
HS-SCCH Code Change Grant	0		9.2.1.30S		-	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A		_	
MIMO Mode Indicator	0		9.2.1.135		YES	reject
Single Stream MIMO Mode Indicator	0		9.2.2.107		YES	reject
Diversity Mode	0		9.2.2.8	If Diversity mode = "Closed loop mode 1" the procedure shall be rejected.	YES	reject
Transmit Diversity Indicator	C- DiversityM ode		9.2.2.48		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
Power Offset For S-CPICH for MIMO Request Indicator	0		9.2.2.105		YES	ignore
Ordinal Number Of Frequency	0		INTEGER (132,)	Value = "1" indicates 1st secondary serving HS- DSCH cell, Value = "2" indicates 2nd secondary serving HS- DSCH cell etc. TS 25.214 [10]. The IE shall be ignored by the DRNS if the new configuration contains one secondary serving radio link.	YES	reject
MIMO with four transmit antennas Mode Indicator	0		9.2.2.146	For FDD only	YES	reject
Dual Stream MIMO with four transmit antennas Mode Indicator	0		9.2.2.150	For FDD only	YES	reject
Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147	For FDD only	YES	ignore
Multiflow Ordinal Number Of Frequency	0		INTEGER (132,)	In intra-Node B multiflow case, the Value specifies the index of the secondary serving or	YES	reject

IE/Group Name	Presence	Range	IE Type and	Semantics	Criticality	Assigned
		_	Reference	Description	_	Criticality
				assisting		
				serving or		
				assisting		
				secondary		
				serving HS-		
				DSCH cell		
				for the UL		
				HS-DPCCH		
				as specified		
				in TS 25.212.		
				In inter-Node		
				B multiflow		
				case, if		
				present, the		
				Value must		
				be "1".		

Condition	Explanation
DiversityMode	The IE shall be present if Diversity Mode IE is present and not
	set to "None".

## 9.2.2.19bc 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 UE Context with the Unsynchronised Radio Link Reconfiguration procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Power Offset	0		9.2.2.19d		_	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A		-	
MIMO Mode Indicator	0		9.2.1.135		YES	reject
Single Stream MIMO Mode Indicator	0		9.2.2.107		YES	reject
Power Offset For S- CPICH for MIMO Request Indicator	0		9.2.2.105		YES	ignore
Ordinal Number Of Frequency	0		INTEGER (132,)	Value = "1" indicates 1st secondary serving HS- DSCH cell, Value = "2" indicates 2nd secondary serving HS- DSCH cell etc. TS 25.214 [10]. The IE shall be ignored by the DRNS if the new configuration contains one secondary serving radio link.	YES	reject
MIMO with four transmit antennas Mode Indicator	0		9.2.2.146	For FDD only	YES	reject
Dual Stream MIMO with four transmit antennas Mode Indicator	0		9.2.2.150	For FDD only	YES	reject
Power Offset For S- CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147	For FDD only	YES	ignore
Multiflow Ordinal Number Of Frequency	0		INTEGER (132,)	In intra-Node B multiflow case, the Value specifies the index of the secondary serving or assisting serving or assisting secondary serving HS- DSCH cell for the UL HS-DPCCH as specified in TS 25.212. In inter-Node B multiflow case, if present, the Value must be "1".	YES	reject

## 9.2.2.19c 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 presented.

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
HS-SCCH Code Change Indicator	0		9.2.1.30R		-	
CQI Feedback Cycle k	0		9.2.2.24a		_	
CQI Repetition Factor	0		9.2.2.24c		_	
ACK-NACK Repetition Factor	0		9.2.2.a		_	
CQI Power Offset	0		9.2.2.24b		_	
ACK Power Offset	0		9.2.2.b		_	
NACK Power Offset	0		9.2.2.26a		_	
HS-PDSCH Code Change Indicator	0		9.2.1.30V		YES	ignore

## 9.2.2.19ca HS-DSCH FDD Secondary Serving Update Information

The *HS-DSCH FDD Secondary Serving Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be presented.

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description
HS-SCCH Code Change Indicator	0		9.2.1.30R	
HS-PDSCH Code Change Indicator	0		9.2.1.30V	This IE shall never be included. If received it shall be ignored.

## 9.2.2.19C 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 (TS 25.213 [21]).

IE/Group Name	Presence	Range	IE type and reference	Semantics description
HS-DSCH Configured Indicator			ENUMERATED (HS- DSCH configured, HS-DSCH not configured)	Indicator of the HS-DSCH configuration for configuration of the E-DPDCHs IQ branch mapping (TS 25.213 [21]).

## 9.2.2.19d 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)	Step 0.25 dB, range -32- +31.75 dB.

# 9.2.2.19e 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	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Update Information		0 <maxn rOfEDCH MACdFlo ws&gt;</maxn 			_	
>E-DCH MAC-d Flow ID	М		9.2.1.91		-	
>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40		_	
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40		_	
E-DCH DL Control Channel Change Information		0 <maxn rOfEDCH RLs&gt;</maxn 			GLOBAL	ignore
>E-DCH RL ID	М		RL ID 9.2.1.49		_	

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE

## 9.2.2.19f 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 9.2.1.49		-	
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.19a		_	
Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.74		YES	reject
Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.72		YES	reject

## 9.2.2.19g 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 Information Response	М		9.2.2.19b		_	
>>HS-DSCH-RNTI	М		9.2.1.30P		-	
>Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	Ignore
>Unsuccessful					_	
>>Cause	М		9.2.1.5		-	

#### 9.2.2.19ga 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	М		9.2.2.19ba	
>>HS-DSCH-RNTI	Μ		9.2.1.30P	
>Unsuccessful				
>>Cause	М		9.2.1.5	

## 9.2.2.19G HS-DSCH TB Size Table Indicator

The HS-DSCH TB Size Table Indicator IE is used to indicate that octet aligned table (TS 25.321 [41]) shall be used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH TB Size Table			ENUMERATED	
Indicator			(octet aligned)	

## 9.2.2.19h 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 <maxnr OfRLs&gt;</maxnr 		
>>>RL ID	М		9.2.1.49	
>>>E-DCH FDD DL	М		9.2.2.4D	
Control Channel				
Information				
>Unsuccessful				
>>Cause	М		9.2.1.5	

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for one UE.

9.2.2.20 IB\_SG\_POS

Void.

#### 9.2.2.21 IB\_SG\_REP

Void.

#### 9.2.2.21a 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 for the UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Inner Loop DL PC Status			ENUMERAT	
			ED(Active, Inactive)	

#### 9.2.2.21b Initial DL DPCH Timing Adjustment Allowed

The *Initial DL DPCH Timing Adjustment Allowed* IE indicates that the DRNS 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			ENUMERATED (	
Adjustment Allowed			initial DL DPCH	
			Timing Adjustment	
			Allowed)	

#### 9.2.2.21A 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, DRNS shall use the limited power increase algorithm as specified in TS 25.214 [10], subclause 5.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Limited Power Increase			ENUMERAT	
			ED(Used,	
			Not used , )	

#### 9.2.2.21B IPDL FDD Parameters

The IPDL FDD Parameters IE provides the information for the IPDL Configuration applied in FDD mode.

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
IP spacing FDD	М		ENUMERAT ED(5,7,10,1 5,20,30,40,5 0,)	See TS 25.214 [10].
IP length	М		ENUMERAT ED(5,10,)	See TS 25.214 [10].
IP offset	М		INTEGER(0. .9)	See TS 25.214 [10].
Seed	М		INTEGER(0. .63)	See TS 25.214 [10].
Burst mode parameters	0		9.2.1.4B	

#### 9.2.2.21C Length of TFCI2

Void.

- 9.2.2.21D Void
- 9.2.2.21E Void
- 9.2.2.21F Void
- 9.2.2.22 Max Adjustment Period

Void.

#### 9.2.2.23 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 adjustments shall be maximum 1 dB. 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)	Slots.

## 9.2.2.24 Max Number of UL DPDCHs

Maximum number of uplink DPDCHs 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)	

#### 9.2.2.24a 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			ENUMERAT ED (0, 2, 4, 8, 10, 20, 40, 80, 160,, 16, 32, 64)	Unit ms The allowed values for this IE depend on the configured CQI Repetition Factor and the HS-DSCH configuration as defined in TS 25.214 [10].

### 9.2.2.24b 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 TS 25.213 [21] subclause 4.2.1.

#### 9.2.2.24c CQI Repetition Factor

The CQI Repetition Factor IE indicates the consecutive repetition of the CQI.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CQI Repetition Factor			INTEGER (1,4,)	Step: 1.

#### 9.2.2.24d Measurement Power Offset

The Measurement Power Offset IE is used as defined in TS 25.214 [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.

#### 9.2.2.24e Maximum Set of E-DPDCHs

The Maximum Set of E-DPDCHs as defined in TS 25.212 [9]. 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)	

#### 9.2.2.24f Void

#### 9.2.2.24A Min DL Channelisation Code Length

Void

## 9.2.2.25 Min UL Channelisation Code Length

Minimum UL channelisation code length (spreading factor) of a DPDCH during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code			ENUMERAT	
Length			ED(4,8,16,	
			32,64,128,	
			256)	

## 9.2.2.26 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			ENUMERAT	
			ED(Fixed,	
			Flexible)	

#### 9.2.2.26a 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 TS 25.213 [21] subclause 4.2.1.

## 9.2.2.26A Number of DL Channelisation Codes

This parameter notifies DRNS of the number of DL channelisation codes required for the Radio Link(s).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number of DL Channelisation Codes			INTEGER (18)	

## 9.2.2.27 Pattern Duration (PD)

Void

#### 9.2.2.27a PC Preamble

Indicates DPDCH power control preamble length see TS 25.105 [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCP Preamble			INTEGER (07,)	In number of frames.

## 9.2.2.27A PDSCH Code Mapping

Void.

## 9.2.2.27B Phase Reference Update Indicator

The Phase Reference Update Indicator IE indicates that the phase reference for the radio link needs to be changed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Phase Reference Update indicator			ENUMERATED (Phase Reference needs to be changed)	

## 9.2.2.28 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Adjustment Type			ENUMERAT	
			ED(None,	
			Common,	
			Individual)	

## 9.2.2.29 Power Control Mode (PCM)

Void.

#### 9.2.2.30 Power Offset

This IE defines a power offset relative to the Downlink transmission power of a DPCH in case the UE Context is configured to use DPCH in the downlink.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset			INTEGER	Unit dB,
			(024)	Step 0.25 dB,
				Range 06 dB.

## 9.2.2.31 Power Resume Mode (PRM)

Void.

#### 9.2.2.31A Preamble Signatures

Void.

## 9.2.2.32 Primary CPICH Ec/No

Energy per chip divided by the power density per band measured on the Primary CPICH by the terminal.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Ec/No			INTEGER (-30+30)	Unit dB, step 1 dB. The value range is typically within the range of -24 dB to 0 dB according to the CPICH Ec/Io UE measurement defined in TS 25.133 [23].

## 9.2.2.32A 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 Channel Estimation			ENUMERATED (Primary CPICH may be used, Primary CPICH shall not be used)	

## 9.2.2.33 Propagation Delay (PD)

Propagation delay is the one-way propagation delay of the radio signal from the UE to the Node B. If the range of the *Propagation Delay* IE is insufficient to represent the measured value, it shall be set to its maximum value, and the *Extended Propagation Delay* IE (see 9.2.2.33a) shall be used to represent the propagation delay value.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Propagation Delay			INTEGER (0255)	Unit: Chips. Step: 3 chips. 0=0 chips, 1=3 chips

## 9.2.2.33a 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 9.2.2.33) 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 TS 25.133 [23]. Unit: chip. Range: 7653069 chips. Step: 3 chips.

## 9.2.2.33A PRACH Minimum Spreading Factor

Void.

9.2.2.34 QE-Selector

Void.

9.2.2.34a Qth Parameter

Void.

#### 9.2.2.34A RACH Sub Channel Numbers

Void.

#### 9.2.2.35 RL Set ID

The RL Set ID uniquely identifies one RL Set within a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Set ID			INTEGER	
			(031)	

## 9.2.2.35a 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	Criticality	Assigned Criticality
RL Specific E-DCH Information		1 <maxnrof EDCHMACd Flows&gt;</maxnrof 			-	
>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Bearer Not Requested Indicator	0		9.2.2.4S		YES	ignore
E-AGCH Power Offset	0		9.2.2.61		_	
E-RGCH Power Offset	0		9.2.2.62		-	
E-HICH Power Offset	0		9.2.2.63		_	

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

## 9.2.2.35A Received Total Wide Band Power

The parameter indicates the Received total wide band power in a cell, see TS 25.215 [11].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Received Total Wide Band Power			INTEGER(0. 621)	According to mapping in TS 25 133 [23]
Band Power			.621)	25.133 [23].

#### 9.2.2.36 S-Field Length

Void.

- 9.2.2.36A Void
- 9.2.2.37 Scrambling Code Change

Void.

9.2.2.37A Scrambling Code Number

Void.

### 9.2.2.37B Secondary CCPCH Info

Void.

### 9.2.2.38 Secondary CCPCH Slot Format

Void.

## 9.2.2.38A Secondary CPICH Information

The Secondary CPICH Information IE provides the information on the Secondary CPICH when it can be used for channel estimation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code	М		9.2.2.11	
FDD DL Channelisation Code Number	М		9.2.2.14	

## 9.2.2.38B 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	М		9.2.2.38A	
>Secondary CPICH Shall Not Be Used			NULL	

## 9.2.2.38C Serving E-DCH RL

The Serving E-DCH RL IE indicates whether the Serving E-DCH RL is in the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Serving E-DCH RL	М			
>Serving E-DCH RL in this DRNS				
>>Serving E-DCH RL ID	М		RL ID 9.2.1.49	
>Serving E-DCH RL not in this DRNS			NULL	

9.2.2.39 Slot Number (SN)

Void

9.2.2.39a Split Type

Void.

## 9.2.2.39A SRB Delay

Indicates the number of frames after the PC Preamble period during which transmission of data on some RRC Signalling Bearers shall be prohibited by UE in accordance with TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SRB Delay			INTEGER(0. .7,)	In number of frames.

## 9.2.2.40 SSDT Cell Identity

Void.

9.2.2.40A SSDT Cell Identity for EDSCHPC

Void.

9.2.2.41 SSDT Cell Identity Length

Void.

9.2.2.42 SSDT Indication

Void.

## 9.2.2.43 SSDT Support Indicator

The possibility to use SSDT Support Indicator has been removed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSDT Support Indicator			ENUMERAT ED(Not Used, SSDT not supported).	The SSDT Support Indicator IE shall never be set to "Not Used".

## 9.2.2.44 STTD Indicator

Void.

## 9.2.2.45 STTD Support Indicator

The STTD Support Indicator indicates whether the STTD can be applied to DL DPCH and F-DPCH in the cell or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
STTD Support Indicator			ENUMERAT ED(STTD	
			Supported, STTD not	
			Supported).	

## 9.2.2.45A 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 Reference	Semantics Description
Synchronisation Indicator			ENUMERATED	
			(Timing Maintained	
			Synchronisation,)	

## 9.2.2.46 TFCI Signalling Mode

This parameter indicates has only one value with any meaning.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Signalling Mode			ENUMERAT ED(Normal, Not Used)	The value "Not Used" shall not be used by the SRNC. The procedure shall be rejected by the DRNC if the value "Not Used" is received.

## 9.2.2.46A TFCI PC Support Indicator

Void.

## 9.2.2.47 Transmission Gap Distance (TGD)

Void.

## 9.2.2.47A Transmission Gap Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence. For details see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Gap Pattern Sequence Information		1 <maxtgps></maxtgps>		
>TGPSI Identifier	M		INTEGER(1< MaxTGPS>)	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	M		INTEGER(01 4)	Transmission Gap Starting Slot Number The slot number of the first transmission gap slot within the TGCFN.
>TGL1	М		INTEGER(11 4)	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots.
>TGL2	0		INTEGER(11 4)	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	М		INTEGER(1 144,)	The duration of transmission gap pattern 1 in frames.
>Not-to-be-used-1	0		INTEGER(1 144,)	This IE shall never be included in the IE group. If received it shall be ignored.
>UL/DL mode	M		ENUMERATE D(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		ENUMERATE D(not Used, SF/2, higher layer scheduling,)	Method for generating downlink compressed mode gap The <i>Downlink Compressed</i> <i>Mode Method</i> IE shall never be set to "not Used".
>Uplink Compressed Mode Method	C-UL		ENUMERATE D(SF/2, higher layer scheduling,)	Method for generating uplink compressed mode gap.
>Downlink Frame Type	М		ENUMERATE D(A, B,)	Defines if frame type "A" or "B" shall be used in downlink compressed mode.
>DeltaSIR1	М		INTEGER(03 0)	Delta in SIR target value to be set in the DRNS 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) Step 0.1 dB, Range 0-3dB.
>DeltaSIRafter1	M		INTEGER (030)	Delta in SIR target value to be set in the DRNS one frame after the frame containing the start of the first transmission gap in the

			transmission gap pattern,. Step 0.1 dB, Range 0-3dB.
>DeltaSIR2	0	INTEGER (030)	<ul> <li>Delta in SIR target value to be set in the DRNS 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)</li> <li>When omitted, DeltaSIR2 = DeltaSIR1.</li> <li>Step 0.1 dB, Range 0-3dB.</li> </ul>
>DeltaSIRafter2	0	INTEGER (030)	<ul> <li>Delta in SIR target value to be set in the DRNS one frame after the frame containing the start of the second transmission gap in the transmission gap pattern.</li> <li>When omitted, DeltaSIRafter2 = DeltaSIRafter1.</li> <li>Step 0.1 dB, Range 0-3dB.</li> </ul>

Condition	Explanation
UL	The IE shall be present if the UL/DL mode IE is set to "UL only" or
	"UL/DL".
DL	The IE shall be present if the UL/DL mode IE is set to "DL only" or
	"UL/DL".

Range bound	Explanation
maxTGPS	Maximum number of transmission gap pattern sequences.

## 9.2.2.47B Transmission Gap Pattern Sequence Scrambling Code Information

This IE indicates whether or not the alternative scrambling code will be used in the DRNS for the Downlink compressed mode method "SF/2" in the Transmission Gap Pattern Sequence. For details see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Gap Pattern Sequence Scrambling Code Information			ENUMERAT ED(code change, no code change)	Code change = alternative scrambling code will be used.

## 9.2.2.48 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
Т	Fransmit Diversity Indicator			ENUMERAT	
				ED(active,	
				inactive)	

## 9.2.2.49 Transmit Gap Length (TGL)

Void

#### 9.2.2.50 Tx Diversity Indicator

The Tx Diversity Indicator indicates if the following conditions are satisfied:

- Primary CPICH is broadcast from two antennas
- STTD is applied to Primary CCPCH
- TSTD is applied to Primary SCH and Secondary SCH

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Tx Diversity Indicator			ENUMERAT	
-			ED(true,	
			false).	

#### 9.2.2.50A UE Support Of Dedicated Pilots For Channel Estimation

Void.

#### 9.2.2.50B UE Support Of Dedicated Pilots For Channel Estimation Of HS-DSCH

Void.

#### 9.2.2.51 UL/DL Compressed Mode Selection

Void

#### 9.2.2.52 UL DPCCH Slot Format

Indicates the slot format used in DPCCH in UL, according to TS 25.211 [8].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL DPCCH Slot Format			INTEGER	Value 5 shall not be used.
			(05,)	If value 5 is received, the
				procedure shall be rejected.

## 9.2.2.52A UL DPDCH Indicator for E-DCH operation

This IE indicated whether the requested configuration actually contain an UL DPDCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL DPDCH Indicator for E-			ENUMERAT	
DCH operation			ED (UL-	
			DPDCH	
			present, UL-	
			DPDCH not	
			present)	

## 9.2.2.53 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	М		INTEGER (0 2 <sup>24</sup> -1)	
UL Scrambling Code Length	M		ENUMERAT ED(Short, Long)	

#### 9.2.2.54 Uplink Delta SIR

Void

#### 9.2.2.55 Uplink Delta SIR After

Void

## 9.2.2.56 DPC Mode Change Support Indicator

The DPC Mode Change Support Indicator IE indicates that the particular cell is capable to support DPC mode change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPC Mode Change Support Indicator			ENUMERATTE D (DPC Mode Change Supported)	

## 9.2.2.57 HARQ Preamble Mode

The HARQ Preamble Mode IE is used as described as described in TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Preamble Mode			ENUMERATED(mod e0, mode1)	"mode0" means HARQ Preamble Mode =0. "mode1" means HARQ Preamble Mode =1.

## 9.2.2.58 HARQ Preamble Mode Activation Indicator

The HARQ Preamble Activation Indicator indicates if the configured HARQ Preamble Mode has been activated in the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Preamble Mode			ENUMERAT	
Activation Indicator			ED(HARQ	
			Preamble	
			Mode	
			Activated).	

## 9.2.2.59 Frequency Band Indicator

The Frequency Band Indicator IE indicates frequency band as defined in TS 25.104 [6].

Presence	Range	IE type and	Semantics description
		reference	
		ENUMERAT	
		ED (Band I,	
		Band II,	
		Band III,	
		Band IV,	
		Band V,	
		Band VI,	
		Band VII,	
		Band XIX,	
	Presence	Presence     Range	reference       ENUMERAT       ED (Band I,       Band II,       Band III,       Band IV,       Band V,

#### 9.2.2.60 E-RGCH Release Indicator

Indicates that the E-RGCH is released..

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH Release Indicator			ENUMERATED (E- RGCH released)	

#### 9.2.2.61 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 (0255,)	Unit: dB. Range: -32 +31.75 dB. Step: 0.25 dB.

## 9.2.2.61A E-AGCH Table Choice

The E-AGCH Table Choice IE indicates the choice of the E-AGCH table in TS 25.212 [9].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH Table Choice	Μ		ENUMERATED (Table 16B, Table 16B-1,)	Table 16B indicates the Table 16B: Mapping of Absolute Grant Value in [9] and Table 16B-1 indicates the Table 16B.1: Alternative Mapping of Absolute Grant Value in TS 25.212 [9].

#### 9.2.2.62 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.

#### 9.2.2.63 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.

#### 9.2.2.64 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 TS 25.321 [41]).
Threshold			(037)	Table (See 13 25.521 [41]).

#### 9.2.2.65 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 TS 25.321 [41]).

#### 9.2.2.66 HARQ Info for E-DCH

The HARQ Info for E-DCH 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 TS 25.212 [9].

## 9.2.2.67 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- HSDPA Operation			ENUMERATED (DCH not present)	

#### 9.2.2.68 E-RGCH and E-HICH Channelisation Code Validity Indicator

The *E*-*RGCH and E*-*HICH Channelisation Code Validity Indicator* parameter indicates if the *E*-*RGCH/E*-*HICH Channelisation Code* IE shall be ignored in the *E*-*DCH FDD DL Control Channel Information* IE in which the *E*-*RGCH and E*-*HICH Channelisation Code Validity Indicator* IE was included.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH and E-HICH Channelisation Code Validity			ENUMERATED (E-RGCH and E-	
Indicator			HICH Channelisation Code not valid)	

## 9.2.2.69 E-DCH Minimum Set E-TFCI Validity Indicator

The *E-DCH Minimum Set E-TFCI Validity Indicator* parameter indicates if the *E-DCH Minimum Set E-TFCI* IE shall be ignored in the *E-DCH Transport Format Combination Set Information* IE in which the *E-DCH Minimum Set E-TFCI Validity Indicator* IE was included.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Minimum Set E-TFCI Validity Indicator			ENUMERATED (E-DCH Minimum	
			Set E-TFCI not valid)	

## 9.2.2.70 Fast Reconfiguration Mode

The *Fast Reconfiguration Mode* IE is used to notify the DRNS 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)	

## 9.2.2.71 Fast Reconfiguration Permission

The *Fast Reconfiguration Permission* IE is used to indicate to the SRNC that the DRNS 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 Permission			ENUMERATED ( Allowed)	

## 9.2.2.72 Continuous Packet Connectivity DTX-DRX Information

The *Continuous Packet Connectivity DTX-DRX Information* IE defines the parameters used for Continuos Packet Connectivity DTX-DRX operation (see TS 25.214 [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE DTX DRX Offset	М		INTEGER (0159)	Units of subframes. Offset of the UE DTX and DRX cycles at the given TTI.
Enabling Delay	Μ		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames.
DTX Information		1		
>CHOICE E-DCH TTI Length	М			
>>2 <i>m</i> s				
>>>UE DTX Cycle 1	М		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes.
>>>UE DTX Cycle 2	Μ		ENUMERATED (4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160)	Units of subframes.
>>>MAC DTX Cycle	М		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes.
>>10ms				
>>>UE DTX Cycle 1	М		ENUMERATED (1, 5, 10, 20)	Units of subframes.
>>>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 DTX Cycle 2	М		ENUMERATED (1, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs.
>UE DTX Long Preamble	М		ENUMERATED (2,4,15)	Units of slots.
>MAC Inactivity Threshold	M		ENUMERATED (1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of E-DCH TTIs.
>CQI DTX Timer	M		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of subframes.
>UE DPCCH burst1	М		ENUMERATED (1, 2, 5)	Units of subframes.
>UE DPCCH burst2	М		ENUMERATED (1, 2, 5)	Units of subframes.
DRX Information		01		
>UE DRX Cycle	М		ENUMERATED (4, 5, 8, 10, 16, 20)	Units of subframes.
>Inactivity Threshold for UE DRX Cycle	М		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512)	Units of subframes.
>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.

## 9.2.2.73 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 UE 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 >Modify	0			
>>CHOICE E-DCH TTI Length	0			
>>>2ms >>>>UE DTX Cycle 1	0		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes.
>>>>UE DTX Cycle 2	0		ENUMERATED (4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160)	Units of subframes.
>>>>MAC DTX Cycle	0		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes.
>>>10ms				
>>>>UE DTX Cycle 1	0		ENUMERATED (1, 5, 10, 20)	Units of subframes.
>>>>UE DTX Cycle 2	0		ENUMERATED (5, 10, 20, 40, 80, 160)	Units of subframes.
>>>>MAC DTX Cycle	0		ENUMERATED (5, 10, 20)	Units of subframes.
>>Inactivity Threshold for UE DTX Cycle 2	0		ENUMERATED (1, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs.
>>UE DTX Long Preamble	0		ENÚMERATED (2,4,15)	Units of slots.
>>MAC Inactivity Threshold	0		ENUMERATED (1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of E-DCH TTIs
>>CQI DTX Timer	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of subframes.
>>UE DPCCH burst1	0		ENUMERATED (1, 2, 5)	Units of subframes.
>>UE DPCCH burst2	0		ENÚMERATED (1, 2, 5)	Units of subframes.
>Deactivate				
CHOICE DRX Information To Modify	0			
>Modify				
>>UE DRX Cycle	0		ENUMERATED (4, 5, 8, 10, 16, 20)	Units of subframes.
>>Inactivity Threshold for	0		ENUMERATED (0,	Units of subframes.

UE DRX Cycle		1, 2, 4, 8, 16, 32 128, 256, 512)	2, 64,
>>Inactivity Threshold for UE Grant Monitoring	0	ENUMERATED 1, 2, 4, 8, 16, 32 128, 256)	
>>UE DRX Grant Monitoring	0	BOOLEAN	True = DRX Grant Monitoring shall be applied. False = DRX Grant Monitoring shall not be applied.
>Deactivate		NULL	

## 9.2.2.74 Continuous Packet Connectivity HS-SCCH less Information

The *Continuous Packet Connectivity HS-SCCH less Information* IE defines the parameters used for Continuos Packet Connectivity HS-SCCH less operation (see TS 25.214 [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		1 <maxnr OfHS- DSCHTBS s-HS- SCCHless &gt;</maxnr 		
>Transport Block Size Index	M		INTEGER (1maxNrOfHS- DSCHTBSs)	
>HS-PDSCH Second Code Support	М		BOOLEAN	True = The second HS- PDSCH code shall also be used. False = The second HS- PDSCH code shall not be used.

Range Bound	Explanation
maxNrOfHS-DSCHTBSs-HS-SCCHless	Maximum number of HS-DSCH Transport Block Sizes used for HS- SCCH-less operation.
maxNrOfHS-DSCHTBSs	Maximum number of HS-DSCH Transport Block Sizes.

## 9.2.2.75 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 TS 25.214 [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description		
HS-PDSCH First Code Index	М		INTEGER (1maxHS- PDSCHCodeNrCom p-1)	Index of first HS-PDSCH code.		
HS-PDSCH Second Code Index	0		INTEGER (1maxHS- PDSCHCodeNrCom p-1)	Index of second HS-PDSCH code. See Note 1.		
NOTE 1: The "HS-PDSCH second by 1.	NOTE 1: The "HS-PDSCH second code index" value is the value of IE "HS-PDSCH First Code Index" incremented					

Range Bound	Explanation
maxHS-PDSCHCodeNrComp	Maximum number of codes at the defined spreading factor, within the
	complete code tree.

## 9.2.2.75A Continuous Packet Connectivity HS-SCCH Less Deactivate Indicator

The Continuous Packet Connectivity HS-SCCH Less Deactivate Indicator IE is used to deactive HS-SCCH less operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Continuous Packet Connectivity HS-SCCH Less	М		NULL	
Deactivate Indicator				

#### 9.2.2.76 MIMO Activation Indicator

Void

#### 9.2.2.77 MIMO Mode Indicator

Void

#### 9.2.2.78 MIMO Information Response

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Pilot Configuration	Μ			
>Primary and Secondary CPICH				
>>MIMO S-CPICH Channelisation Code	Μ		INTEGER (0255)	
>Normal and Diversity Primary CPICH			NULL	
MIMO N/M Ratio	М		ENUMERATED (1/2, 2/3, ¾, 4/5, 5/6, 6/7, 7/8, 8/9, 9/10, 1/1,)	
Additional Associated Secondary CPICH		0 <maxs CPICHCell -1&gt;</maxs 		For the additional secondary CPICHs.
>Additional Associated S- CPICH Channelisation Code	Μ		INTEGER (0255)	
>Additional Associated D- CPICH Channelisation Code	0		INTEGER (0255)	

## 9.2.2.79 SixtyfourQAM DL Support Indicator

Void.

#### 9.2.2.79A 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 Reference	Semantics Description
Sixtyfour QAM Usage Allowed Indicator	Μ		ENUMERATED (Allowed, Not- Allowed)	

## 9.2.2.79B 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)	

#### 9.2.2.80 Enhanced FACH Support Indicator

Void.

9.2.2.81 Enhanced PCH Support Indicator

Void.

9.2.2.82 Priority Queue Information for Enhanced FACH/PCH

Void.

9.2.2.83 SixteenQAM UL Information

Void.

9.2.2.84 SixteenQAM UL Information To Modify

Void.

#### 9.2.2.85 F-DPCH Slot Format

The F-DPCH Slot Format IE defines the F-DPCH slot format for the TPC bits, as defined in TS 25.211 [8].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-DPCH Slot Format			INTEGER (09)	

#### 9.2.2.86 F-DPCH Slot Format Support Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-DPCH Slot Format Support			NULL	
Request				

#### 9.2.2.87 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.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max UE DTX Cycle	Μ		ENUMERATED (v5, v10, v20, v40, v64, v80, v128, v160,)	Units of subframes.

## 9.2.2.88 Enhanced PCH Capability

Void.

9.2.2.89 MAC-ehs Reset Timer

Void.

# 9.2.2.90 SixteenQAM UL Operation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixteenQAM UL Operation Indicator	0		ENUMERATED (Activate, Deactivate)	

#### 9.2.2.90a SixtyfourQAM UL Operation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixtyfourQAM UL Operation	0		ENUMERATED	
Indicator			(Activate,	
			Deactivate)	

## 9.2.2.91 E-TFCI Boost Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-TFCI BetaEC Boost	Μ		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.

# 9.2.2.92 Common E-DCH Support Indicator

This IE indicates the Common E-DCH Support.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH Support Indicator			NULL	

# 9.2.2.93 Common E-DCH MAC-d Flow Specific Information

The *Common E-DCH MAC-d Flow Specific Information* IE provides information associated to Common E-DCH MAC-d Flow used for Common E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 		
>Common E-DCH MAC-d Flow ID	M		E-DCH MAC-d flow 9.2.1.91	
>Maximum Number Of Retransmissions For E-DCH	М		9.2.1.100	
>E-DCH HARQ Power Offset FDD	Μ		9.2.2.4L	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89	
>Common E-DCH Logical Channel information	M	1 <maxno OfLogical Channels&gt;</maxno 		
>>Logical Channel ID	М		9.2.1.97	
>>Maximum MAC-d PDU Size Extended	Μ		MAC PDU Size Extended 9.2.1.34D	

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d Flows.
maxNoOfLogicalChannels	Maximum number of logical channels.

# 9.2.2.94 Counting Information

The Counting Information IE provides counting result for MBMS service for each cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Counting Information		1 <maxnr OfFDDNei ghboursPe rRNC&gt;</maxnr 		
>C-ID	М		9.2.1.6	
>Counting Result	М		INTEGER (063)	The number of Ues listen to the MBMS Service. If the number of the UE is more than 63, this IE set to 63.

Range bound	Explanation
maxNrOfFDDNeighboursPerRNC	Maximum number of neighbouring FDD cell for one cell.

#### 9.2.2.95 Transmission Mode Information

The Transmission Mode Information IE provides transmission mode for MBMS service for each cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Counting Information		1 <maxnr< th=""><th></th><th></th></maxnr<>		
_		OfFDDNei		
		ghboursPe		
		rRNC>		
>C-ID	М		9.2.1.6	
>Transmission Mode	М		9.2.1.81	

Range bound	Explanation
maxNrOfFDDNeighboursPerRNC	Maximum number of neighbouring FDD cell for one cell.

# 9.2.2.96 MBMS Neighbouring Cell Information

The parameter contains information for the MBMS p-t-m radio bearer configuration procedure as defined in TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBMS Neighbouring Cell Information				
>MBMS Concatenated Service List		1 <maxlen gthMBMSco ncatservlist s &gt;</maxlen 		TMGI shall be uniquely defined by a reference to this index from the <i>MBMS short</i> <i>transmission identity</i> IE (TS 25.331 [16]) in the <i>L3</i> <i>Information</i> IE.
>>TMGI	М		9.2.1.80	
>L3 Information	0		9.2.1.32	The IE Contains MBMS COMMON P-T-M RB INFORMATION defined in TS 25.331 [16].
>L3 Information	0		9.2.1.32	The IE Contains MBMS CURRENT CELL P-T- M RB INFORMATION defined in TS 25.331 [16].

Range bound	Explanation
maxlengthMBMSconcatservlists	Maximum length of the concatenated service lists contained in MBMS MODIFIED SERVICES INFORMATION and the MBMS UNMODIFIED SERVICES INFORMATION messages defined in TS 25.331 [16].

## 9.2.2.97 RLC Sequence Number

This parameter indicates the RLC Sequence Number.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RLC Sequence Number			INTEGER (0127)	

#### 9.2.2.98 Time Stamp

This parameter indicates the Time Stamp used for Inter-RNC MBMS synchronisation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Stamp			INTEGER (09999)	Units: 10ms.

#### 9.2.2.99 HS-DSCH Preconfiguration Info

The *HS-DSCH Preconfiguration Info* IE provides information of the target cell preconfiguration in the DRNS as defined in TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Sets of HS-SCCH Codes		1 <max NrOfHSD SCH&gt;</max 	Kelerence	Index 1 refers to the serving HS-DSCH cell Index 2 <maxnrofhsdsch> refer to secondary serving HS-DSCH cells in the order as listed in 9.2.2.100 HS-DSCH Preconfiguration Setup. Max index is 4 in this 3GPP release.</maxnrofhsdsch>	_	
>HS-SCCH Preconfigured Codes		1 <maxn rOfHSSC CHCodes &gt;</maxn 			_	
>>Code Number	М		INTEGER (0127)		_	
>HS-DSCH- RNTI	М		9.2.1.31J		_	
>HS-PDSCH And HS-SCCH Scrambling Code	M		DL Scramblin g Code 9.2.2.11		_	
>SixtyfourQAM DL Support Indicator	0		9.2.1.123		_	
>SixtyfourQAM DL Usage Indicator	0		9.2.2.79B		-	
>HS-DSCH TB Size Table Indicator	0		9.2.2.19G		-	
>MIMO Information Response	0		9.2.2.78	Applicable for multicarrier mode of operation.	YES	ignore
>Power Offset For S-CPICH for MIMO	0		9.2.2.104	Applicable for multicarrier mode of operation. The "Power Offset For S- CPICH for MIMO" in the index 1 of "Sets of HS- SCCH Codes" shall be ignored.	YES	ignore
>Measurement Power Offset	0		9.2.2.24d		YES	ignore
>Power Offset For S-CPICH for MIMO with four transmit antennas	0		9.2.2.148	Applicable for multicarrier mode of operation. The "Power Offset For S- CPICH for MIMO" in the index 1 of "Sets of HS- SCCH Codes" shall be ignored.	YES	ignore
HARQ Memory Partitioning	М		9.2.1.116		_	
E-DCH FDD DL Control Channel Information	0		9.2.2.4D	For the primary UL frequency in Dual-cell E- DCH mode of operation.	-	
HARQ Preamble Mode Activation Indicator	0		9.2.2.58		-	
MIMO Information Response	0		9.2.2.78	Only applicable for MIMO in singe carrier mode of operation. Shall be ignored in multicarrier mode of operation.	_	
Continuous Packet	0		9.2.2.75		-	

Connectivity HS- SCCH less Information Response						
Power Offset For S- CPICH for MIMO	0		9.2.2.104	For the serving HS-DSCH cell in both the single carrier mode and multicarrier mode of operation.	YES	ignore
Additional E-DCH Preconfiguration Information		0 <maxn rOfEDCH -1&gt;</maxn 		For E-DCH on multiple frequencies in this DRNS. E-DCH on Secondary uplink frequency – max 1 in this 3GPP release. Index 1 correspond to the secondary serving HS- DSCH cells with index 2 in the IE Sets of HS- SCCH Codes. The list is in the order as listed in 9.2.2.100 HS-DSCH Preconfiguration Setup.	EACH	ignore
>E-DCH FDD DL Control Channel Information	M		9.2.2.4D	For the secondary UL frequency In Dual-cell E- DCH mode of operation.	-	
Support of dynamic DTXDRX related HS-SCCH order	0		9.2.2.129		YES	ignore
Power Offset For S- CPICH for MIMO with four transmit antennas	0		9.2.2.148	For the serving HS-DSCH cell in both the single carrier mode and multicarrier mode of operation.	YES	ignore

Range bound	Explanation
maxNrOfHSSCCHCodes	Maximum number of HS-SCCH codes
maxNrOfHSDSCH	Maximum number of Primary Serving plus Secondary Serving HS- DSCH cells for one UE
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE

# 9.2.2.100 HS-DSCH Preconfiguration Setup

The *HS-DSCH Preconfiguration Setup* IE indicates that the DRNS 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 TS 25.308 [63]

IE/Group Name	Prese nce	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
MAC-hs/ehs reset scheme	М		ENUMERAT ED (Always, Inter NodeB Change)	MAC-hs/ehs reset handling at enhanced HS serving cell change: "Always" means always reset "Inter NodeB Change" means Only reset at inter Node B cell change.	_	
HS-DSCH Physical Layer Category	Μ		9.2.1.30Oa		-	
MAC-hs Reordering Buffer Size for RLC-UM	М		9.2.1.34Ab		-	
Secondary Cells		0 <maxn rOfHSDS CH-1&gt;</maxn 		Preconfigured secondary serving HS-DSCH cell. <i>maxNrOfHSDSCH-1</i> is max 3 in this 3GPP release.	-	
>Secondary C-ID	М		C-ID 9.2.1.6	C-ID of the preconfigured secondary serving HS-DSCH cell.	_	
>Num Secondary HS- SCCH Codes	0		INTEGER (1 <i>maxNrOf</i> HSSCCHCo des)	For the secondary serving HS-DSCH cell.	_	
>Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A	For the secondary serving HS-DSCH cell.	_	
>MIMO Activation Indicator	0		9.2.1.134	For the secondary serving HS-DSCH cell.	YES	ignore
>E-DCH Indicator	0		NULL	The secondary serving HS-DSCH cell shall be pre- configured with E- DCH.	YES	ignore
>Power Offset For S- CPICH for MIMO Request Indicator	0		9.2.2.105	For the secondary serving HS-DSCH cell.	YES	ignore
>MIMO with four transmit antennas Activation Indicator	0		9.2.2.145	For the secondary serving HS-DSCH cell	YES	ignore
>Dual Stream MIMO with four transmit antennas Activation Indicator	0		9.2.2.149	For the secondary serving HS-DSCH cell	YES	ignore
>Power Offset For S- CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147	For the secondary serving HS-DSCH cell	YES	ignore
Num Primary HS-SCCH Codes	0		INTEGER (1 maxNrOfHS SCCHCodes )	For the primary serving HS-DSCH cell.	_	
HARQ Preamble Mode MIMO Activation Indicator	0		9.2.2.57 9.2.1.134	In multicarrier mode of operation the IE is for the serving HS- DSCH cell.		
HS-DSCH MAC-d PDU Size Format	0		9.2.1.30OC	If not present, "Indexed MAC-d PDU Size" shall be	_	

			assumed.		
Sixtyfour QAM Usage Allowed Indicator	0	9.2.2.79A	For the serving HS- DSCH cell.	Ι	
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	9.2.2.74		-	
UE Support Indicator Extension	0	9.2.2.103		YES	ignore
Power Offset For S- CPICH for MIMO Request Indicator	0	9.2.2.105	For the serving HS- DSCH cell in both the single carrier mode and multicarrier mode of operation.	YES	ignore
MIMO with four transmit antennas Activation Indicator	0	9.2.2.145	In multicarrier mode of operation the IE is for the serving HS- DSCH cell	YES	ignore
Dual Stream MIMO with four transmit antennas Activation Indicator	0	9.2.2.149	In multicarrier mode of operation the IE is for the serving HS- DSCH cell	YES	ignore
Power Offset For S- CPICH for MIMO with four transmit antennas Request Indicator	0	9.2.2.147	For the serving HS- DSCH cell in both the single carrier mode and multicarrier mode of operation.	YES	ignore

Range bound	Explanation
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfHSSCCHCodes	Maximum number of HS-SCCH codes.

# 9.2.2.101 Secondary Serving Cell List

This *Secondary Serving Cell List* IE identifies the possible secondary serving HS-DSCH cells for a Multi Cell/Dual-Band capable cell that is able to serve as a serving HS-DSCH cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Possible Secondary Serving Cell List		1 <maxnrof HSDSCH-1&gt;</maxnrof 		For secondary serving HS-DSCH cell.	_	
>Possible Secondary Serving Cell	М		C-ID 9.2.1.6		_	
>Multicell E-DCH Restriction	0		BOOLEAN	TRUE means restricted FALSE or not included means no restrictions.	YES	ignore

Range bound	Explanation
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE. See NOTE below.
NOTE: In this case, "maxNrOfHSDSCH	<i>1</i> " represents the maximum number of possible secondary serving cells
for a Multi Cell/Dual-Band capable cell.	

# 9.2.2.102 Minimum Reduced E-DPDCH Gain Factor

The minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in TS 25.214 [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,)	

# 9.2.2.103 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 DRNS.

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, the third bit: RRC ReI-9 (onwards) handling of DL secondary HS-DSCH (de)activation state Support Indicator, the fourth bit: UE DTXDRX related HS-SCCH orders uniform behavior indicator. the fifth bit: UE longer HARQ processing time for simultaneous Multiflow and MIMO operation 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.

# 9.2.2.104 Power Offset For S-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 TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset For S-CPICH for MIMO			INTEGER(-6 0)	Offset in dB.

## 9.2.2.105 Power Offset For S-CPICH for MIMO Request Indicator

The *Power Offset For S-CPICH for MIMO Request Indicator* IE is present when the SRNC needs the DRNS to supply, if possible, the *Power Offset For S-CPICH for MIMO* IE when S-CPICH is used as a phase reference for a second transmit antenna in MIMO mode TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset For S-CPICH for MIMO Request Indicator			NULL	

#### 9.2.2.106 Single Stream MIMO Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Single Stream MIMO Activation Indicator	М		NULL	

#### 9.2.2.107 Single Stream MIMO Mode Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Single Stream MIMO Mode			ENUMERATED	
Indicator			(Activate,	
			Deactivate)	

## 9.2.2.108 HS-DSCH MAC-ehs Format

Void.

#### 9.2.2.109 Activation Information

The *Activation Information* IE defines the local activation state of the secondary uplink frequency of the UE in Dual Cell E-DCH operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Activation Information		1 <maxnro fEDCH-1&gt;</maxnro 	For secondary E- DCH. Max 1 in this 3GPP release.	
>Uu Activation State	Μ		ENUMERATED (Activated, De-activated,)	The activation state of the secondary UL frequency.

Range Bound	Explanation
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL DPCH Information		1			_	
>UL Scrambling Code	М		9.2.2.53		_	
>UL SIR Target	0		UL SIR 9.2.1.69		-	
Additional E-DCH RL Specific Information To Setup	М		9.2.2.115		-	
Additional E-DCH FDD Information	0		9.2.2.112		_	
F-DPCH Information		1			_	
>FDD TPC DL Step Size	М		9.2.2.16		_	
>Limited Power Increase	М		9.2.2.21A		_	
>Inner Loop DL PC Status	М		9.2.2.21a		_	
>F-DPCH Slot Format Support Request	0		9.2.2.86		-	
Multicell E-DCH Information	0		9.2.2.114		YES	ignore

# 9.2.2.110 Additional E-DCH FDD Setup Information

	9.2.2.111	Additional E-DCH Configuration Change Information
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IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL DPCH Information		01			_	
>UL Scrambling Code	0		9.2.2.53		_	
>UL SIR Target	0		UL SIR 9.2.1.69		_	
Additional E-DCH RL Specific Information To Add	0		9.2.2.116	Used when the E-DCH RL to add does not exist in the current UE context on the secondary UL frequency.	_	
Additional E-DCH RL Specific Information To Modify	0		9.2.2.117	Used when an existing E- DCH RL on the secondary UL frequency is modified.	_	
Additional E-DCH FDD Information To Modify	0		Additional E- DCH FDD Information 9.2.2.112	Used to modify the current additional E- DCH configuration with or without a new RL added in this procedure.	_	
F-DPCH Information		01			—	
>FDD TPC DL Step Size	М		9.2.2.16		_	
>Limited Power Increase	М		9.2.2.21A		_	
>Inner Loop DL PC Status	М		9.2.2.21a		_	
>F-DPCH Slot Format Support Request	0		9.2.2.86		_	
Multicell E-DCH Information	0		9.2.2.114		YES	ignore

# 9.2.2.112 Additional E-DCH FDD Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional E-DCH FDD Information				
>HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40	
>E-DCH Maximum Bitrate	0		9.2.2.4MG	
>E-DCH Processing Overload Level	0		9.2.1.95	
>E-DCH Minimum Set E- TFCI	0		INTEGER (0127)	For the concept of "E-DCH Minimum Set of TFCs" see TS 25.321 [41] and TS 25.331 [16].

# 9.2.2.113 Multicell E-DCH Transport Bearer Mode

This parameter indicates the Multicell E-DCH Transport Bearer Mode. For *Multicell E-DCH Transport Bearer Mode* = "Separate Iur Transport Bearer Mode" the Mac-d flows from each carrier uses different Iur transport bearers, for *Multicell E-DCH Transport Bearer Mode* = "UL Flow Multiplexing Mode" the Mac-d flows received on the different carriers in the DRNS is multiplexed on one Iur transport bearer (per Mac-d flow). The SRNC should apply the stored cell capabilities for the cell on primary UL frequency for the capabilities related to Multicell E-DCH Transport Bearer Mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multicell E-DCH Transport			ENUMERATED	
Bearer Mode			(Separate lur	
			Transport Bearer	
			Mode, UL Flow	
			Multiplexing Mode)	

# 9.2.2.114 Multicell E-DCH Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power Balancing Information	0		9.2.2.10A	
Minimum Reduced E-DPDCH Gain Factor	0		9.2.2.102	
Secondary UL Frequency Activation State	0		ENUMERATED (Activated, Deactivated,)	
F-DPCH Slot Format	0		9.2.2.85	
Common DL Reference Power	0		DL power 9.2.1.21A	Power on F-DPCH.

#### 9.2.2.115 Additional E-DCH RL Specific Information To Setup

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Additional RL Specific Information		1 <maxn rOfEDCH RLs&gt;</maxn 			-	
>E-DCH Additional RL ID	М		RL ID 9.2.1.49		_	
>C-ID	0		9.2.1.6		_	
>First RLS Indicator	М		9.2.2.16A		_	
>Propagation Delay	0		9.2.2.33		_	
>Initial DL Tx Power	0		DL Power 9.2.1.21A			
>Primary CPICH Ec/No	0		9.2.2.32		_	
>E-AGCH Power Offset	0		9.2.2.61		_	
>E-RGCH Power Offset	0		9.2.2.62		_	
>E-HICH Power Offset	0		9.2.2.63		_	
>Additional E-DCH MAC-d Flow Specific Information	0		9.2.2.118		_	
>Multicell E-DCH RL Specific Information	0		9.2.2.119		YES	ignore

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Additional RL Specific Information To Add		1 <maxn rOfEDCH RLs&gt;</maxn 			_	
>E-DCH Additional RL ID	М		RL ID 9.2.1.49		_	
>C-ID	М		9.2.1.6		_	
>Primary CPICH Ec/No	0		9.2.2.32		_	
>E-AGCH Power Offset	0		9.2.2.61		-	
>E-RGCH Power Offset	0		9.2.2.62		_	
>E-HICH Power Offset	0		9.2.2.63		_	
>Additional E-DCH MAC-d Flow Specific Information	0		9.2.2.118		_	
>Multicell E-DCH RL Specific Information	0		9.2.2.119		YES	ignore

# 9.2.2.116 Additional E-DCH RL Specific Information To Add

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.

# 9.2.2.117 Additional E-DCH RL Specific Information To Modify

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Additional RL Specific Information to Modify		1 <maxnr OfEDCHR Ls&gt;</maxnr 			-	
>E-DCH Additional RL ID	М		RL ID 9.2.1.49		_	
>E-AGCH Power Offset	0		9.2.2.61		-	
>E-RGCH Power Offset	0		9.2.2.62		-	
>E-HICH Power Offset	0		9.2.2.63		_	
>Additional E-DCH MAC-d Flow Specific Information	0		9.2.2.118		-	
>Multicell E-DCH RL Specific Information	0		9.2.2.119		YES	ignore

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.

# 9.2.2.118 Additional E-DCH MAC-d Flow Specific Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 		
>E-DCH MAC-d Flow ID	М		9.2.1.91	
>Binding ID	0		9.2.1.3	
>Transport Layer Address	0		9.2.1.62	

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.2.2.119 Multicell E-DCH RL Specific Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Propagation Delay	0		9.2.2.33a	
Enhanced Primary CPICH Ec/No	0		9.2.2.131	
DL Reference Power	0		DL power 9.2.1.21A	
Phase Reference Update Indicator	0		9.2.2.27B	
E-DCH DL Control Channel Grant	0		NULL	

# 9.2.2.120 Additional E-DCH FDD Information Response

The Additional E-DCH FDD Information Response IE provides information for new E-DCH radio links on the secondary UL frequency.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional E-DCH RL		1 <maxnr< td=""><td></td><td></td></maxnr<>		
Information Response		OfEDCHR		
		Ls>		
>E-DCH Additional RL ID	Μ		RL ID 9.2.1.49	
>Received Total Wide Band Power	Μ		9.2.2.35A	
>DL Power Balancing	0		9.2.2.10B	
Activation Indicator				
>RL Set ID	М		9.2.2.35	
>E-DCH RL Set ID	М		RL Set ID 9.2.2.35	
>E-DCH FDD DL Control	М		9.2.2.4D	
Channel Information				
>DL Code Information	M		FDD DL Code Information 9.2.2.14A	
>Additional E-DCH MAC-d Flow Specific Information		0 <maxnr OfEDCHM ACdFlows</maxnr 		
Response		>		
>>E-DCH MAC-d Flow ID	М		9.2.1.91	
>>Binding ID	0		9.2.1.3	
>>Transport Layer Address	0		9.2.1.62	
>HARQ Process Allocation	0		HARQ Process	
For 2ms Scheduled			Allocation for 2ms	
Transmission Grant			TTI 9.2.2.40	
Movimum Liplink SIP	Μ		Uplink SIR	
>Maximum Uplink SIR	101		9.2.1.69	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69	
>Maximum Allowed UL Tx	М		9.2.1.35	
Power				
>Maximum DL TX Power	М		DL Power 9.2.1.21A	
>Minimum DL TX Power	М		DL Power 9.2.1.21A	
>Primary Scrambling Code	0		9.2.1.45	
>UL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nu in TS 25.104 [6].
>DL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nd in TS 25.104 [6].
>Primary CPICH Power	M		9.2.1.44	23.104 [0].
>PC Preamble	M		9.2.2.27a	
>Primary CPICH Usage For	0		9.2.2.32A	
Channel Estimation				
>Secondary CPICH Information	0		9.2.2.38A	
>F-DPCH Slot Format	0		9.2.2.85	

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.2.2.121 Additional Modified E-DCH FDD Information Response

The *Additional Modified E-DCH RL Information Response* IE provides information for RLs on the secondary UL frequency that has been modified and existied in the UE Context configuration before the reconfiguration procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional Modified E-DCH		1 <maxnr< td=""><td></td><td></td></maxnr<>		
RL Information Response		OfEDCHR		
		Ls>		
>E-DCH Additional RL ID	М		RL ID 9.2.1.49	
>DL Power Balancing Updated Indicator	0		9.2.2.10D	
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D	
>Additional E-DCH MAC-d Flow Specific Information Response		0 <maxnr OfEDCHM ACdFlows &gt;</maxnr 		
>>E-DCH MAC-d Flow ID	М		9.2.1.91	
>>Binding ID	0		9.2.1.3	
>>Transport Layer Address	0		9.2.1.62	
>HARQ Process Allocation	0		HARQ Process	
For 2ms Scheduled			Allocation for 2ms	
Transmission Grant			TTI 9.2.2.40	
>Maximum Uplink SIR	0		Uplink SIR 9.2.1.69	
>Minimum Uplink SIR	0		Uplink SIR 9.2.1.69	
>Maximum DL TX Power	0		DL Power 9.2.1.21A	
>Minimum DL TX Power	0		DL Power 9.2.1.21A	
>Primary CPICH Usage For Channel Estimation	0		9.2.2.32A	
>Secondary CPICH Information Change	0		9.2.2.38B	
>F-DPCH Slot Format	0		9.2.2.85	

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.2.2.122 Additional E-DCH FDD Update Information

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40	
Additional E-DCH DL Control Channel Change Information		0 <max NrOfED CHRLs &gt;</max 		
> E-DCH Additional RL ID	М		RL ID 9.2.1.49	

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.

#### 9.2.2.123 Cell Capability Container Extension FDD

The *Cell Capability Container Extension FDD* IE is an extension to the *Cell Capability Container FDD* IE and indicates the cell capability in the same way as *Cell Capability Container Extension FDD* IE.

The cell capability of multi-cell related functions may depend on that the cell is multi-cell capable (adjacent and/or nonadjacent carrier) or Dual Band capable. Such support indicators in this *Cell Capability Container Extension FDD* IE shall be ignored by the SRNC if the cell does not have the required support indicated in the *Cell Capability Container FDD* IE: Multi Cell Support Indicator = "1" and/or Dual Band Support Indicator = "1". Support indicators that depend on multi-cell (adjacent and/or non-adjacent carrier) support are indicated in the table below with /Adjacent-carrier/. Support indicators that depend on Dual Band support are indicated in the table below with /Dual-band/. Support indicators that depend on that the cell supports one or both of multi-cell (adjacent and/or non-adjacent carrier) and Dual Band are indicated in the table below with /Multi-cell/. The marked support indicators indicate the support regardless of the supported multi-cell type in a multicell configuration: supported multi-cell type is - both serving HS-DSCH and secondary serving HS-DSCH, - secondary serving HS-DSCH or - serving HS-DSCH.

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IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container Extension FDD			Reference         BIT STRING (128)         Image: stress st	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 Support Indicator, /Multi-cell/. The second bit: Multi Cell and MIMO Support Indicator, /Adjacent-carrier/. The third bit: Multi Cell and Single Stream MIMO Support Indicator, /Adjacent- carrier/. The fourth bit: Multi Cell E- DCH Support Indicator, /Adjacent-carrier/. This bit shall be ignored by the SRNC if the fifth bit: Separate lur Transport Bearer Support Indicator = "0" and the sixth bit: E-DCH UL Flow Multiplexing Support Indicator = "0" The fifth bit: Separate lur Transport Bearer Support Indicator, /Adjacent-carrier/. This bit shall be ignored by the SRNC if the fourth bit: Multi Cell E-DCH Support Indicator, /Adjacent-carrier/. This bit shall be ignored by the SRNC if the fourth bit: Multi Cell E-DCH Support Indicator = "0" The sixth bit: E-DCH UL Flow Multiplexing Support Indicator, /Adjacent-carrier/. This bit shall be ignored by the SRNC if the fourth bit: Multi Cell E-DCH Support Indicator, /Adjacent-carrier/. This bit shall be ignored by the SRNC if the fourth bit: Multi Cell E-DCH Support Indicator, /Multi-cell/. This support indicator is coded as the binary representation of the maximum number of HSDPA Frequencies, with the seventh bit as the MSB and the eleventh bit as the LSB. Hexadecimal digit 0 means no support for 3 or more HSDPA carriers. Hexadecimal digit 0 means no support for 3 or more HSDPA carriers. Hexadecimal digit 1 and 2 are reserved. The twelfth bit: Dual Band and MIMO Support Indicator,

<u> </u>
or more Carrier and MIMO
Single Band Support
Indicator, /Adjacent-carrier/
The fourteenth bit: HSDPA 3
or more Carrier and MIMO
Dual Band Support Indicator,
/Dual Band/.
The fifteenth bit: Dual band
and Single Stream MIMO
Support Indicator,/Dual
Band/. The sixteenth bit: HSDPA 3
or more Carrier and Single
Stream MIMO Single Band Support Indicator, /Adjacent-
Carrier/.
The seventeenth bit: HSDPA
3 or more Carrier and Single
Stream MIMO Dual Band
Support Indicator,/Dual
Band/.
The eighteenth bit:
Frequency Specific
Compress Mode
Capability/Multi-cell/.
The nineteenth bit: UL CLTD
capability.
The twentieth to twenty-
second bit: Supported MIMO
transmit antennas (N). This
capability is coded as the
representation of the
supported MIMO transmit
antennas with the twentieth
bit as the MSB and the
twentys-econd bit as the
LSB. Hexadecimal digit 0
means no support for more
than 2 MIMO transmit
antennas. Hexadecimal digit
2 means MIMO with four
transmit antennas support.
Hexadecimal digit 1 is
reserved. Undefined values
are considered as spare.
The twenty-third bit: MIMO
with N transmit antennas
Capability Adjacent-carrier.
The twenty-fourth bit: MIMO with N transmit antennas
Capability Dual Band/Dual Band.
The twenty-fifth bit: Multi Cell
and MIMO with N transmit
antennas Capability
Adjacent-carrier.
The twenty-sixth bit: Multi
Cell and MIMO with N
transmit antennas Capability
Dual Band/Dual Band.
The twenty-seventh bit:
HSPA 3 or more Carrier and
MIMO with N transmit
antennas Capability
Adjacent-carrier.
The twenty-eighth bit: HSPA
3 or more Carrier and MIMO
with N transmit antennas

	Capability Dual Band/Dual Band.
	This 3GPP release supports MIMO with four transmit antennas for up to 4 carriers.
	The twenty-ninth bit: Intra-Node B Multiflow. The thirtieth bit: Inter-Node B Multiflow. The thirty-first to thirty-third bits: Supported Multiflow configuration, where value 0 indicates support for one frequency two cells, value 1 indicates support for two frequencies three cells, value 2 indicates support for two frequencies four cells. Values 3-7 are reserved for future use. The thirty-fourth bit: Multiflow and MIMO. The thirty-fifth bit: Cell Specific Tx Diversity Handling For Multiflow Cell Operation. The thirty-sixth bit: Multiflow and single stream MIMO.
	The thirty-seventh bit: UL SixtyfourQAM capability. The thirty-eighth bit: UL MIMO capability. The thirty-ninth bit: UL MIMO and SixteenQAM capability. The fourtieth bit: UL MIMO and SixtyfourQAM capability.
	The fourty-first bit: Common E-RGCH 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. 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

# 9.2.2.124 Non-Serving RL Preconfiguration Setup

The *Non-Serving RL Preconfiguration Setup* IE indicates that the DRNS may preconfigure E-DCH DL Code Information configured for new non-serving RL for Enhanced Service Cell Change and contains the information for the location of new serving RL after the Enhanced Serving Cell Change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE new Serving RL	М				—	
>New Serving RL in the DRNS			NULL		-	
>New Serving RL Not in the DRNS			NULL		_	
>New Serving RL in the DRNS or New Serving RL Not in the DRNS			NULL		-	
Additional E-DCH Non- Serving RL Preconfiguration Setup	0		NULL		YES	ignore

# 9.2.2.125 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 Reference	Semantics Description	Criticality	Assigned Criticality
New non-serving RL E-DCH FDD DL Control Channel Information A	0		9.2.2.4D E-DCH FDD DL Control Channel Information	E-DCH FDD DL Control Channel Information for non- serving RL in Serving E- DCH RLS.	_	
New non-serving RL E-DCH FDD DL Control Channel Information B	0		9.2.2.4D E-DCH FDD DL Control Channel Information	E-DCH FDD DL Control Channel Information for non- serving RL in non serving E-DCH RLS in in case serving RL is in the DRNS.	_	
New non-serving RL E-DCH FDD DL Control Channel Information C	0		9.2.2.4D E-DCH FDD DL Control Channel Information	E-DCH FDD DL Control Channel Information for non- serving RL in case serving RL is not in the DRNS.	_	
Additional E-DCH New non-serving RL E-DCH FDD DL Control Channel Information		0 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency - max 1 in this 3GPP release.	EACH	ignore
>New non-serving RL E- DCH FDD DL Control Channel Information A	0		9.2.2.13Dc E-DCH FDD DL Control Channel Information	E-DCH FDD DL Control Channel Information for Additional non-serving RL in Serving E- DCH RLS.	_	
>New non-serving RL E- DCH FDD DL Control Channel Information B	0		9.2.2.13Dc E-DCH FDD DL Control Channel Information	E-DCH FDD DL Control Channel Information for Additional non-serving RL in non serving E- DCH RLS in case Additional serving RL is in the DRNS.	_	
>New non-serving RL E- DCH FDD DL Control Channel Information C	0		9.2.2.13Dc E-DCH FDD DL Control Channel Information	E-DCH FDD DL Control Channel Information for Additional non-serving RL in case Additional	_	

	serving RL not in the	is	
	DRNS.		

Range bound	Explanation
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

#### 9.2.2.126 Void

#### 9.2.2.127 Usefulness of Battery Optimization

This IE, when present, indicates whether the device can benefit from UTRAN-based battery consumption optimisation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Usefulness of Battery Optimization			Enumerated ( CanBenefit, CannotBenefit )	

#### 9.2.2.128 M1 Report

This IE defines the parameters for M1 report, FDD report of UE radio measurements

IE/Group Name	Presence	Range	IE type and reference	Semantics description
M1 Report				
>CHOICE Report trigger	М			
>>Periodic				
>>>MDT Report Parameters	М		9.2.1.140	
>>Event1F				
>>>Measurement quantity	М		ENUMERATED( CPICH Ec/N0, CPICH RSCP, Pathloss,)	
>>>threshold	М		INTEGER(-120165)	Range used depends on measurement quantity. CPICH RSCP -12025 dBm. CPICH Ec/No -240 dB Pathloss 30165dB.

# 9.2.2.129 Support of Dynamic DTXDRX Related HS-SCCH Order

The *Support of dynamic DTXDRX related HS-SCCH order* IE is to indicate if DRNS supports the DRX/DTX related HS-SCCH order for CPC non-uniform UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Support of dynamic DTXDRX related HS-SCCH order			ENUMERATED (Supported, Not Supported)	

# 9.2.2.130 UL CLTD Information Reconf

The UL CLTD Information Reconf IE is used for the reconfiguration of the UL CLTD operation in a UE context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Setup, Configuration Change or Removal of UL CLTD		1		
>Setup				Used when UL CLTD is not configured in the current UE Context.
>>UL CLTD Information	Μ		9.2.2.131	
>Configuration Change				Used when the existing UL CLTD configuration in the current UE context is modified.
>>UL CLTD information To Modify	Μ		9.2.2.132	
>Removal				Used when the existing UL CLTD configuration in the current UE context is removed.
>>UL CLTD information Removal	Μ		9.2.2.133	

# 9.2.2.131 UL CLTD Information

The UL CLTD Information IE defines the parameters used for UL CLTD operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-DPCCH Power Offset Information	Μ		9.2.2.137	
C-ID	C- DCHonly		9.2.1.6	
UL CLTD Activation Information	0		9.2.2.138	

Condition	Explanation
DCHonly	The IE shall be present only if there is no serving E- DCH RL or HS-DSCH RL configuration in the concerned UE context.

## 9.2.2.132 UL CLTD Information To Modify

The UL CLTD information To Modify IE is used for modification of UL CLTD information in a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-DPCCH Power Offset Information	0		9.2.2.137	
UL CLTD Activation Information	0		9.2.2.138	

#### 9.2.2.133 UL CLTD Information Removal

The UL CLTD Information Removal IE is used for removal of UL CLTD information in a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL CLTD Information Removal			ENUMERATED (Remove,)	

# 9.2.2.134 UL CLTD State Update Information

The UL CLTD Update Information IE provides information for the activation state of UL CLTD of the UE to be updated.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description
UL CLTD State Update Information			ENUMERATED (Activate,De-activate, )	The suggested UL CLTD activation state.

# 9.2.2.135 F-TPICH Slot Format

Indicates the slot format used in F-TPICH in DL, accordingly to ref. TS 25.211 [8].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Slot Format			INTEGER (09,)	

# 9.2.2.136 F-TPICH Offset

The F-TPICH 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
F-TPICH Offset			INTEGER (0149)	Range: 038144 chips. Step: 256 chips. See ref. TS 25.211 [8].

# 9.2.2.137 S-DPCCH Power Offset Information

The S-DPCCH Power Offset is used to calculate the S-DPCCH gain factor,  $\beta_{sc}$ , as defined in TS 25.214 [10], whereas  $\beta_{sc}$  is related to the power difference between DPCCH and S-DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-DPCCH Power Offset Information			INTEGER (06,)	According to mapping in ref. TS 25.213 [21] subclause 4.2.1.4.

# 9.2.2.138 UL CLTD Activation Information

The UL CLTD Activation Information IE defines the activation state of the UE in UL CLTD operation.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description
>UL CLTD Activation State	Μ		ENUMERATED (Activated, De-activated,)	The activation state of the UL CLTD.

## 9.2.2.139 F-TPICH Information

The F-TPICH Information IE defines the parameters used for F-TPICH configuration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Offset	Μ		9.2.2.136	

#### 9.2.2.140 F-TPICH Information To Modify

The F-TPICH Information To Modify IE is used for modification of F-TPICH configuration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Offset	0		9.2.2.136	

## 9.2.2.141 F-TPICH Information Removal

The F-TPICH Information Removal IE is used for removal of F-TPICH information of a RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Information Removal			ENUMERATED (Remove,)	

## 9.2.2.142 F-TPICH Information Reconf

The F-TPICH Information Reconf IE is used for the reconfiguration of the UL CLTD operation of a RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Setup, Configuration Change or Removal of F- TPICH Information		1		
>Setup				Used when F-TPICH is not configured in the current RL.
>>F-TPICH Information	Μ		9.2.2.139	
>Configuration Change				Used when the existing UL F- TPICH configuration in the current RL is modified.
>>F-TPICH Information To Modify	М		9.2.2.140	
>Removal				Used when the existing UL F- TPICH in the current RL is removed.
>>F-TPICH information Removal	М		9.2.2.141	

#### 9.2.2.143 F-TPICH Information Response

The F-TPICH Information Response IE provides F-TPICH information determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Slot Format	М		9.2.2.135	
F-TPICH Channelisation Code	М		FDD DL	
Number			Channelisation Code Number 9.2.2.14	

#### 9.2.2.144 F-TPICH Reconfiguration Information

The *F-TPICH Reconfiguration Information Response* IE provides F-TPICH reconfiguration information triggered by the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Slot Format	0		9.2.2.135	
F-TPICH Channelisation Code	0		FDD DL	
Number			Channelisation Code Number 9.2.2.14	

#### 9.2.2.145 MIMO with four transmit antennas Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO with four transmit antennas Activation Indicator	М		NULL	

#### 9.2.2.146 MIMO with four transmit antennas Mode Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO with four transmit	Μ		ENUMERATED	
antennas Mode Indicator			(Activate,	
			Deactivate)	

# 9.2.2.147 Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator

The *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is present when the SRNC needs the DRNS to supply, if possible, the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE when S-CPICH and additional S-CPICH is used as a phase reference for additional transmit antenna in MIMO with four transmit antennas mode TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset For S-CPICH for MIMO with four transmit	М		NULL	
antennas Request Indicator				

#### 9.2.2.148 Power Offset For S-CPICH for MIMO with four transmit antennas

The *Power Offset For S-CPICH for MIMO with four transmit antennas* IE indicates the relative transmit power of the Associated S-CPICH compared to the primary CPICH transmit power, when S-CPICH is used as a phase reference for additional transmit antenna in MIMO with four transmit antennas mode TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Associated Secondary CPICH		1 <maxscpichcell></maxscpichcell>		For MIMO with four transmit antennas. The 3 <sup>rd</sup> and the 4 <sup>th</sup> S- CICH should have the same power offset; The 3 <sup>rd</sup> and the 4 <sup>th</sup> D- CPICH should have the same power offset.
>Associated S-CPICH Channelisation Code	М		INTEGER (0255)	
>Power Offset for Associated S-CPICH	М		INTEGER (- 120)	Offset in dB
>Associated D-CPICH Channelisation Code	М		INTEGER (0255)	
>Power Offset for Associated D-CPICH	М		INTEGER (- 120)	Offset in dB

#### 9.2.2.149 Dual Stream MIMO with four transmit antennas Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dual Stream MIMO with four transmit antennas Activation Indicator	Μ		NULL	

#### 9.2.2.150 Dual Stream MIMO with four transmit antennas Mode Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dual Stream MIMO with four transmit antennas Mode Indicator	М		ENUMERATED (Activate, Deactivate)	

## 9.2.2.151 Multiflow Reconfiguration

The Multiflow Reconfiguration IE is used setup, reconfigure, and stop Multiflow operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Setup, or Change, or Stop		1		
>Setup				Used when Multiflow is not configured.
>>Multiflow Information	М		9.2.2.152	
>Change				Used when Multiflow configuration changes.
>>Multiflow Information To Modify	М		9.2.2.153	
>Stop				Used when the existing Multiflow configuration is removed.
>>Multiflow Stop	М		9.2.2.154	

#### 9.2.2.152 Multiflow Information

The Multiflow Information IE defines parameters to setup Multiflow operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Total number of HS-DSCH cells	М		INTEGER (232,)	Total number of HS-DSCH cells configured for Multiflow.	-	
Role	M		Multiflow Role 9.2.2.155		-	
MIMO	M		Multiflow MIMO 9.2.2.156			
Timing	0		Multiflow Timing 9.2.2.157	In the inter-Node B Multiflow case, if present, this IE provides the timing information.		
Max number of HS-SCCH sets per Node B	0		INTEGER (116,)	Maximum number of HS- SCCH that can be allocated per NodeB	-	

# 9.2.2.153 Multiflow Information To Modify

The Multiflow Information To Modify IE defines parameters to reconfigure Multiflow operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Total number of HS-DSCH cells	0		INTEGER (232,)	Total number of HS-DSCH cells configured for Multiflow.	-	
Role	0		Multiflow Role 9.2.2.155		-	
MIMO	0		Multiflow MIMO 9.2.2.156			
Timing	0		Multiflow Timing 9.2.2.157	In the inter-Node B Multiflow case, if present, this IE provides the timing information.		
Max number of HS-SCCH sets per Node B	0		INTEGER (116,)	Maximum number of HS- SCCH that can be allocated per NodeB	-	

# 9.2.2.154 Multiflow Stop

The Multiflow Stop IE is used when the Multiflow operation is terminated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiflow Stop	М		ENUMERATED (Stop,)	

#### 9.2.2.155 Multiflow Role

The Multiflow Role IE is used to specify primary or assisting Multiflow operation mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiflow Role	Μ		ENUMERATED (Primary, Assisting, )	This IE indicates whether Node B is configured with the primary serving HS-DSCH cell or assisting serving HS-DSCH cell.

#### 9.2.2.156 Multiflow MIMO

The Multiflow MIMO IE is used to specify whether MIMO is configured for at least one of the cells.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiflow MIMO	М		ENUMERATED (ON, OFF, <mark>)</mark>	

# 9.2.2.157 Multiflow Timing

The *Multiflow Timing IE* is used to specify timing information for the Multiflow operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Reference, or Non-time Reference		1		
>Time Reference			NULL	This indicates that UL HS- DPCCH timing for this Node B is as in the legacy case (refer to TS 25.211, sub-clause 7.7.1).
>Non-time Reference			INTEGER (03840,)	This IE indicates that the UL HS-DPCCH timing is handled differently to the legacy case with an offset defined by this IE in chips (refer to TS 25.211, sub-caluse 7.7.2).

#### 9.2.2.158 UL MIMO Reconfiguration

The UL MIMO Reconfiguration IE is used for the reconfiguration of the UL MIMO operation in a UE context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Setup, Configuration Change or Removal of UL MIMO		1		
>Setup				Used when UL MIMO is not configured in the current UE Context.
>>UL MIMO Information	М		9.2.2.159	
>Configuration Change				Used when the existing UL MIMO configuration in the current UE context is modified.
>>UL MIMO information To Modify	М		9.2.2.160	
>Removal				Used when the existing UL MIMO configuration in the current UE context is removed.
>>UL MIMO information Removal	Μ		9.2.2.161	

# 9.2.2.159 UL MIMO Information

The UL MIMO Information IE defines the parameters used for UL MIMO operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-ROCH Power Offset	0		9.2.2.163	
S-E-DPCCH Power Offset	М		9.2.2.164	
Inter-stream Interference Compensation Index	Μ		9.2.2.165	
Minimum E-TFCI for rank 2 transmissions	М		INTEGER (0127)	For the concept of "Minimum TB size for rank 2 transmissions" see TS 25.321 [32] and TS 25.331 [18].

# 9.2.2.160 UL MIMO Information To Modify

The UL MIMO information To Modify IE is used for modification of UL MIMO information in a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-ROCH Power Offset	0		9.2.2.163	
S-E-DPCCH Power Offset	0		9.2.2.164	According to $\Delta_{S-E-DPCCH}$ mapping in ref. TS 25.213 [9] subclause 4.2.1.5.
Inter-stream Interference Compensation Index	0		9.2.2.165	
Minimum E-TFCI for rank 2 transmissions	0		INTEGER (0127)	For the concept of "Minimum TB size for rank 2 transmissions" see TS 25.321 [32] and TS 25.331 [18].

## 9.2.2.161 UL MIMO Information Removal

The UL MIMO Information Removal IE is used for removal of UL MIMO information in a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL MIMO Information Removal	М		ENUMERATED (Remove,)	

# 9.2.2.162 UL MIMO DL Control Channel Information

UL MIMO DL Control Information contains the Node B allocation of the UL MIMO specific DL control channels. Secondary Transport Block E-HICH Signature Sequence is used to acknowledge the secondary transport block transmitted in the uplink, and it uses the same channelization code as the E-HICH used for non-MIMO and primary transport block acknowledgements. E-ROCH Channelization Code is selected from the pool allocated for E-AGCH codes.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-ROCH Channelization Code	0		FDD DL Channelisation Code Number 9.2.2.14	Should be present for the serving E-DCH cell only.
Secondary Transport Block E- RNTI	0		E-RNTI 9.2.1.75	E-ROCH S-E-RNTI as defined in ref. TS 25.212 [8] subclause 4.10A.
Secondary Transport Block E- HICH Signature Sequence	0		INTEGER (0maxnoofSigSeqE -RGHICH - 1)	One Secondary TB E-HICH signature sequence should be present at least for the serving E-DCH cell.
Secondary Transport Block E- HICH Release Indicator	0		9.2.2.166	

Range Bound	Explanation
maxnoofSigSeqE-RGHICH	Maximum number of Signature Sequences for E-RGCH/E-HICH.

## 9.2.2.163 E-ROCH Power Offset

The E-ROCH Power Offset IE indicates the power offset relative to the pilot bits.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-ROCH Power Offset	Μ		INTEGER (0255,)	Unit: dB Range: -32 +31.75 dB Step: 0.25 dB

#### 9.2.2.164 S-E-DPCCH Power Offset

The S-E-DPCCH Power Offset is used to calculate the S-E-DPCCH gain factor  $\beta_{sec}$  as defined in TS 25.214 [10], whereas  $\beta_{sec}$  is related to the power difference between DPCCH and S-E-DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-E-DPCCH Power Offset	Μ		INTEGER (017,)	According to $\Delta_{S-E-DPCCH}$ mapping in ref. TS 25.213 [9] subclause 4.2.1.5.

#### 9.2.2.165 Inter-stream Interference Compensation Index

The *Inter-stream Interference Compensation Index* IE indicates an offset that a UE applies while performing the E-TFC selection for the primary stream.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Inter-stream Interference Compensation Index	Μ		INTEGER (015,)	According to $\Delta_{ISI}$ mapping in ref. TS 25.213 [9] subclause 4.2.1.3.

# 9.2.2.166 Secondary Transport Block E-HICH Release Indicator

Indicates the release of the Uplink MIMO transmission's Secondary Transport Block E-HICH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Secondary Transport Block E- HICH Release Indicator	М		ENUMERATED (Secondary Transport Block E- HICH released)	

# 9.2.3 TDD Specific Parameters

This subclause contains parameters that are specific to TDD.

## 9.2.3.a Alpha Value

Used to support signalling of cell specific Alpha Value to SRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Alpha Value			ENUMERAT ED(0, 1/8, 2/8, 3/8, 4/8, 5/8, 6/8, 7/8, 1)	

# 9.2.3.A Block STTD Indicator

Void.

#### 9.2.3.1 Burst Type

Void.

# 9.2.3.1a Cell Capability Container TDD

The Cell Capability Container TDD indicates which functionalities a 3.84Mcps TDD cell supports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container TDD			BIT STRING (32)	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: Delayed Activation Support Indicator. The second bit: HS-DSCH Support Indicator. The third bit: DSCH Support Indicator. The fourth bit: Flexible MAC- d PDU Size Support Indicator. The fifth: MBMS 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.

# 9.2.3.1b Cell Capability Container TDD LCR

The Cell Capability Container TDD LCR indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Cell Capability Container TDD LCR			BIT STRING (32)	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: Delayed Activation Support Indicator. The second bit: HS-DSCH Support Indicator. The third bit: DSCH Support Indicator.
				The fourth bit: Flexible MAC- d PDU Size 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.

# 9.2.3.2 CCTrCH ID

The CCTrCH ID identifies unambiguously a CCTrCH inside a Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CCTrCH ID			INTEGER (015)	

#### 9.2.3.2A 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 Information		1 <maxnr< td=""><td></td><td></td><td>_</td><td></td></maxnr<>			_	
		OfDCHs>				
>Payload CRC Presence Indicator	Μ		9.2.1.42		-	
>UL FP Mode	М		9.2.1.67		-	
>ToAWS	М		9.2.1.58		-	
>ToAWE	М		9.2.1.57		_	
>DCH Specific Info		1 <maxnr OfDCHs&gt;</maxnr 			_	
>>DCH ID	М		9.2.1.16		_	
>>CCTrCH ID	М		9.2.3.2	UL CCTrCH in which the DCH is mapped.	-	
>>CCTrCH ID	M		9.2.3.2	DL CCTrCH in which the DCH is mapped.	_	
>>TrCH Source Statistics Descriptor	М		9.2.1.65		-	
>>Transport Format Set	М		9.2.1.64	For the UL.	-	
>>Transport Format Set	Μ		9.2.1.64	For the DL.	-	
>>BLER	М		9.2.1.4	For the UL.	-	
>>BLER	М		9.2.1.4	For the DL.	-	
>>Allocation/Retention Priority	М		9.2.1.1		-	
>>Frame Handling Priority	М		9.2.1.29		-	
>>QE-Selector	C- CoorDCH		9.2.1.46A		_	
>Guaranteed Rate Information	0		9.2.1.30M		YES	ignore
>>Traffic Class	М		9.2.1.58A		YES	ignore
>>Unidirectional DCH Indicator	0		9.2.1.68B		YES	reject
>TNL QoS	0		9.2.1.56A		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 <i>DCH Specific Info</i> IE is greater than 1).

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

# 9.2.3.2B DCH TDD Information Response

Void

# 9.2.3.2C DL Timeslot Information

The DL Timeslot Information IE provides information on the time slot allocation for a DL DPCH at 3.84Mcps.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Timeslot Information		1 <maxnr OfTS&gt;</maxnr 			_	
>Time Slot	Μ		9.2.1.56		-	
>Midamble Shift And Burst Type	М		9.2.3.4		_	
>TFCI Presence	М		9.2.1.55		_	
>DL Code Information	М		TDD DL Code Information 9.2.3.8C		-	

[	Range bound	Explanation		
	maxNrOfTS	Maximum number of Timeslots for a UE.		

# 9.2.3.2D DL Time Slot ISCP Info

The DL Time Slot ISCP Info IE gives interference level for each DL time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Time Slot ISCP Info		1 <maxnr< td=""><td></td><td></td><td>-</td><td></td></maxnr<>			-	
		OfDLTs>				
>Time Slot	М		9.2.1.56		_	
>DL Timeslot ISCP	Μ		9.2.3.12		-	

Range bound	Explanation
maxNrOfDLTs	Maximum number of downlink time slots per Radio Link for
	3.84Mcps TDD.

# 9.2.3.2E DL Timeslot Information LCR

The DL Timeslot Information LCR IE provides information for DL Timeslot to be established for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Timeslot Information LCR		1 <maxnrof DLTsLCR &gt;</maxnrof 			_	
>Time Slot LCR	М		9.2.3.12a		—	
>Midamble Shift LCR	М		9.2.3.4C		_	
>TFCI Presence	М		9.2.1.55		-	
>DL Code Information LCR	М		TDD DL Code Information LCR 9.2.3.8D		Ι	
>Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH.	YES	ignore
>Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	YES	ignore

Range bound	Explanation
maxNrOfDLTsLCR	Maximum number of Downlink time slots per Radio Link for
	1.28Mcps TDD.

## 9.2.3.2F 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 for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Time Slot ISCP Info LCR		1 <maxnrofu LTsLCR&gt;</maxnrofu 			-	
>Time Slot LCR	М		9.2.3.12a		Ι	
>DL Timeslot ISCP	М		9.2.3.12			

Range bound	Explanation
maxNrOfULTsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD.

## 9.2.3.3 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)	

#### 9.2.3.3a 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 <maxno OfDSCHs&gt;</maxno 			_	
>DSCH ID	Μ		9.2.3.3ae		_	
>CCTrCH ID	М		9.2.3.2	DL CCTrCH in which the DSCH is mapped.	-	
>TrCH Source Statistics Descriptor	М		9.2.1.65		-	
>Transport Format Set	Μ		9.2.1.64		_	
>Allocation/Retention Priority	Μ		9.2.1.1		_	
>Scheduling Priority Indicator	Μ		9.2.1.51A		_	
>BLER	Μ		9.2.1.4		_	
>Traffic Class	Μ		9.2.1.58A		YES	ignore
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore

Range bound	Explanation
maxNoOfDSCHs	Maximum number of DSCHs for one UE.

# 9.2.3.3aa HS-DSCH TDD Information

The HS-DSCH TDD Information IE is used for initial addition of HS-DSCH information to a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flows Information	М		9.2.1.30OA	•	-	
UE Capabilities Information		1			_	
>HS-DSCH Physical Layer Category	М		9.2.1.30Oa		_	
>1.28 Mcps TDD uplink physical channel capability	0		9.2.3.10D	Applicable to 1.28Mcps TDD only.	YES	ignore
>Number of Supported Carriers	0		ENUMERATE D ( One-one carrier, One- three carrier, Three-three carrier, One- six carrier, Tree-six carrier, Six-six carrier, , One-Two carrier Discontiguous, Two-Two carrier Contiguous, Two-Two carrier Contiguous)	Applicable to 1.28Mcps TDD only. This IE indicates the number of carrier that UE can support at the same time,where "One-three carrier" means the number of supported carrier is one for the uplink, and three for the downlink. One-Two carrier Discontiguou s and Two- Two carrier Discontiguou s mean that the UE is capable of supporting two non- adjacent carriers. One-Two carrier Contiguous and Two- Two carrier Contiguous and Two- Two carrier Contiguous and Two- Two carrier Contiguous mean that the UE is only capable of supporting two adjacent carriers.	YES	ignore
For HS-PDSCH dual stream			(SF1, SF1/SF16)	1.28Mcps TDD only.		
>Multi-carrier HS-DSCH Physical Layer Category	0		9.2.1.30Oa	Applicable to 1.28Mcps TDD only.	YES	ignore
>UE TS0 Capability LCR	0		ENUMERATE D (TS0 Capable, TS0 Non-Capable)	Applicable to 1.28Mcps TDD only	YES	ignore
>UE RF Band Capability LCR	C- NofSupport edCarriers		9.2.3.84	Applicable to 1.28Mcps TDD only.	YES	ignore

MAC-hs Reordering Buffer Size for RLC-UM	М	9.2.1.34Ab		-	
TDD ACK NACK Power Offset	М	9.2.3.71		-	
HS-DSCH MAC-d PDU Size Format	0	9.2.1.30OC	If not present, "Indexed MAC-d PDU Size" shall be used.	YES	reject
HS-SICH SIR Target	0	UL SIR 9.2.1.69	Applicable to 1.28Mcps TDD only.	YES	ignore
HS-SICH TPC step size	0	TDD TPC Uplink Step Size 9.2.3.10a	Applicable to 1.28Mcps TDD only.	YES	ignore
TSN-Length	0	9.2.3.3ai	Applicable for 1.28Mcps TDD when using multiple frequencies.	YES	reject
MIMO Activation Indicator	0	9.2.1.134		YES	reject

Condition	Explanation
NofSupportedCarriers	This IE shall be present if the Number of Supported Carriers IE is equal
	to "One-Two carrier Discontiguous" or "Two-Two carrier Discontiguous" and the concerned cell and the UE support more than one RF band.

# 9.2.3.3ab HS-DSCH TDD Information Response

The *HS-DSCH TDD Information Response* IE provides information for HS-DSCH that have been established or modified. It also provides additional HS-DSCH information determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow	+	0 <maxnr< td=""><td>Neierence</td><td></td><td>_</td><td></td></maxnr<>	Neierence		_	
Specific Information Response		OfMACdFI ows>				
>HS-DSCH MAC-d Flow ID	М	01102	9.2.1.30O		_	
>Binding ID	0		9.2.1.3		_	
>Transport Layer Address	0		9.2.1.62		_	
>HS-DSCH Initial Capacity	0		9.2.1.30Na		_	
Allocation	Ũ		0.2.11.00114			
HS-SCCH Specific Information Response		0 <maxnr OfHSSCC HCodes&gt;</maxnr 		Not applicable to 1.28 Mcps TDD or	GLOBAL	reject
				7.68Mcps TDD.		
>Time Slot	М	1	9.2.1.56		_	
>Midamble Shift And Burst	M	1	9.2.3.4		_	
Type						
>TDD Channelisation Code	М	1	9.2.3.8		_	
>HS-SICH Information	1	1	0.2.0.0		_	
>>HS SICH ID	М	1	9.2.3.3ad		_	
>>Time Slot	M		9.2.1.56		_	
>>Midamble Shift And Burst Type	M		9.2.3.4		-	
>>TDD Channelisation Code	М		9.2.3.8		_	
HS-SCCH Specific Information Response LCR		0 <maxnr OfHSSCC HCodes&gt;</maxnr 		Not applicable to 3.84 Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
>Time Slot LCR	М		9.2.3.12a		_	
>Midamble shift LCR	М		9.2.3.4C		_	
>First TDD Channelisation Code	М		TDD Channelisa tion Code 9.2.3.8		_	
>Second TDD Channelisation Code	М		TDD Channelisa tion Code 9.2.3.8		-	
>HS-SICH Information LCR	1	1			_	
>>HS SICH ID	М		9.2.3.3ad		_	
>>Time Slot LCR	M		9.2.3.12a		_	
>>Midamble shift LCR	M		9.2.3.4C		_	
>>TDD Channelisation Code	M		9.2.3.8		-	
>Used Frequency	0		UARFCN 9.2.1.66	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		9.2.1.66	Corresponds to Nt (3GPP TS 25.105). Applicable	YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			Reference	for 1.28Mcps TDD when using multiple frequencies.		
				See note1 below.		
HS-SCCH Specific Information Response 7.68 Mcps		0 <maxnr OfHSSCC HCodes&gt;</maxnr 		Applicable to 7.68 Mcps TDD only.	YES	ignore
>Time Slot	М	11000002	9.2.1.56	TDD only.		
>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.23		-	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		-	
>HS-SICH Information		1			_	
>>HS SICH ID	M		9.2.3.3ad		-	
>>Time Slot	M		9.2.1.56		_	ļ
>>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.23		-	
>>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		-	
HS-PDSCH Timeslot Specific Information Response		0 <maxnr OfDLTs&gt;</maxnr 		Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
>Time Slot	Μ		9.2.1.56		-	
>Midamble Shift And Burst Type	М		9.2.3.4		-	
HS-PDSCH Timeslot Specific Information Response LCR		0 <maxnr OfDLTsLC R&gt;</maxnr 		Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
>Time Slot LCR	Μ		9.2.3.12a		-	
>Midamble Shift LCR	М		9.2.3.4C		-	
HS-PDSCH Timeslot Specific Information Response 7.68Mcps		0 <maxnr OfDLTs&gt;</maxnr 		Applicable to 7.68Mcps TDD only.	YES	Ignore
>Time Slot	Μ		9.2.1.56		-	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23		-	
HARQ Memory Partitioning User Plane Congestion Fields	0		9.2.1.116 9.2.1.70C		 YES	ignore
Inclusion HS-SCCH Specific Information Response LCR		0 <maxh SDPAFreq</maxh 		Applicable for 1.28Mcps	GLOBAL	reject
per UARFCN >HS-SCCH Specific Information Response LCR		uency-1> 1 <maxnr OfHSSCC</maxnr 		TDD.	_	
-	N4	HCodes>	0.0.0.40-			
>>Time Slot LCR >>Midamble Shift LCR	M		9.2.3.12a 9.2.3.4C		_	
<ul> <li>&gt;&gt;Midamble Shift LCR</li> <li>&gt;&gt;First TDD Channelisation Code</li> </ul>	M		TDD Channelisa tion Code 9.2.3.8			
>Second TDD Channelisation Code	М		TDD Channelisa tion Code 9.2.3.8		-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>HS-SICH Information LCR		1	Reference		_	
>>>HS SICH ID	М		9.2.3.3ad			
>>>Time Slot LCR	М		9.2.3.12a		_	
>>>Midamble Shift LCR	М		9.2.3.4C		-	
>>>TDD Channelisation Code	М		9.2.3.8		-	
>>Used Frequency	0		UARFCN 9.2.1.66	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		9.2.1.66	Corresponds to Nt □3GPP TS 25.105□. Applicable for 1.28Mcps TDD when using multiple frequencies. See note 1 below.	YES	ignore
>HARQ Memory Partitioning per UARFCN		0 <maxh SDPAFreq uency-1&gt;</maxh 				
>>HARQ Memory Partitioning	0		9.2.1.116		-	
>UARFCN	0		9.2.1.66	Corresponds to Nt 3GPP TS 25.105 Applicable for 1.28Mcps TDD when using multiple frequencies. See note 1 below.	YES	ignore
>TS0 HS-PDSCH Indication LCR	0		9.2.3.74	1.28Mcps TDD only.	YES	ignore
Multi-Carrier number	0		Integer(1 maxHSDP AFrequenc y)	Applicable for 1.28Mcps TDD when using multiple frequencies.	YES	ignore
MIMO SF Mode for HS- PDSCH dual stream	0		Enumerate d (SF1, SF1/SF16)	Applicable for 1.28Mcps TDD when MIMO is configured.	YES	reject
MIMO Reference Signal Information	0	0 <maxnr OfHSSCC HCodes&gt;</maxnr 		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
>HS-SICH Reference Signal Information	Μ		9.2.3.72		YES	
Out-of-sync Detection Window	0		ENUMERA TED (40, 80, 160, 320, 640, )	Unit: ms Applicable to 1.28Mcps TDD.	YES	reject
Note 1: This information element	is a simplified	representatio	/	1 description.	I	

Range bound	Explanation
maxNrOfMACdFlows	Maximum number of MAC-d flows.
maxNrOfHSSCCHCodes	Maximum number of HS-SCCH codes.
maxNrOfDLTs	Maximum number of downlink time slots per Radio Link for 3.84Mcps TDD.
maxNrOfDLTsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.
maxHSDPAFrequency	Maximum number of Frequency that UE can support HSDPA.

# 9.2.3.3ac 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 presented.

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
HS-SCCH Code Change Indicator	0		9.2.1.30R		-	
TDD ACK NACK Power Offset	0		9.2.3.71		-	

## 9.2.3.3ad 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)	For 1.28Mcps TDD, the IE is INTEGER (0255). In ASN.1, it is presented by another IE for the value beyond the 31.

#### 9.2.3.3ae DSCH ID

The DSCH ID is the identifier of an active downlink shared channel. It is unique for each active DSCH among the active DSCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DSCH ID			INTEGER (0255)	

## 9.2.3.3af DSCH Initial Window Size

Indicates the initial number of MAC-c/sh SDUs that may be transmitted before new credits are received from the DRNC.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DSCH Initial Window Size			INTEGER (1255)	Number of MAC-c/sh SDUs: 255 = Unlimited number of MAC-c/sh SDUs.

## 9.2.3.3ag DSCH Flow Control Information

The DSCH Flow Control Information IE provides flow control information for each scheduling priority class for the DSCH FP over Iur.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DSCH Flow Control Information		116			_	
>DSCH Scheduling Priority	M		Scheduling Priority Indicator 9.2.1.51A		-	
>MAC-c/sh SDU Length		1 <maxnr OfMACcsh SDU- Length&gt;</maxnr 			-	
>>MAC-c/sh SDU Length	Μ		9.2.1.34		-	
>DSCH Initial Window Size	0		9.2.3.3af		YES	ignore

Range bound	Explanation
maxNrOfMACcshSDU-Length	Maximum number of different MAC-c/sh SDU lengths.

## 9.2.3.3ah DSCH-RNTI

DSCH-RNTI is the UE identifier allocated by DRNS to be used over the radio interface by Ues having one or several DSCHs and/or USCHs. It is unique within a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DSCH-RNTI			INTEGER(0. .65535)	

#### 9.2.3.3ai TSN-Length

The IE indicates the TSN length.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSN-Length			ENUMERATED	
-			(tsn-6bits, tsn-9bits)	

## 9.2.3.3A Maximum Number of Timeslots

Defines the maximum number of timeslots the UE has the capability of receiving or transmitting. [3.84Mcps TDD and 7.68Mcps TDD – in a frame] [1.28Mcps TDD – in a subframe]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of			INTEGER	For 1.28Mcps TDD the values 7
Timeslots			(114)	through 14 are not used.

## 9.2.3.3B Maximum Number of UL Physical Channels per Timeslot

Defines the maximum number of physical channels [3.84Mcps TDD and 7.68Mcps TDD – per frame] [1.28Mcps TDD – per subframe] that the UE is capable to transmit.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of UL Physical Channels per Timeslot			INTEGER (12)	

#### 9.2.3.3C Maximum Number of DL Physical Channels

Defines the maximum number of physical channels [3.84Mcps TDD – per frame] [1.28Mcps TDD – per subframe] that the UE is capable to receive.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of DL			INTEGER	For 1.28Mcps TDD the values
Physical Channels			(1224)	97 through 224 are not used.

## 9.2.3.3D Maximum Number of DL Physical Channels per Timeslot

Defines the maximum number of physical channels per timeslot that the UE is capable to receive.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of DL			INTEGER	
Physical Channels per			(116)	
Timeslot				

## 9.2.3.4 Midamble Shift And Burst Type

This information element indicates burst type and midamble allocation.

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				
>Type 1				
>> Midamble Configuration Burst Type 1 And 3	М		ENUMERATED(4, 8, 16)	As defined in TS 25.221 [12].
>>Midamble Allocation Mode	М		ENUMERATED(Defa ult midamble, Common midamble, UE specific midamble)	
>>Midamble Shift Long	C-UE		INTEGER(015)	
>Type 2				
>> Midamble Configuration Burst Type 2	М		ENUMERATED (3, 6)	As defined in TS 25.221 [12].
>>Midamble Allocation Mode	М		ENUMERATED(Defa ult midamble, Common midamble, UE specific midamble)	
>>Midamble Shift Short	C-UE		INTEGER (015)	
>Type 3				UL only
>> Midamble Configuration Burst Type 1 And 3	M		ENUMERATED (4, 8, 16)	As defined in TS 25.221 [12].
>>Midamble Allocation Mode	М		ENUMERATED(Defa ult midamble, UE specific midamble)	
>>Midamble Shift Long	C-UE		INTEGER(015)	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation
	Mode IE is set to "UE-specific midamble".

## 9.2.3.4A Minimum Spreading Factor

Defines the minimum spreading factor the UE has the capability of receiving or transmitting.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Spreading			INTEGER	
Factor			(116)	

## 9.2.3.4B IPDL TDD parameters

The IPDL TDD Parameters IE provides the information for the IPDL Configuration applied in 3.84Mcps TDD mode.

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
IP Spacing TDD	М		ENUMERAT ED(30,40,50 , 70, 100,)	See TS 25.224 [22].
IP Start	М		INTEGER(0. .4095)	See TS 25.224 [22].
IP Slot	М		INTEGER(0. .14)	See TS 25.224 [22].
IP P-CCPCH	М		ENUMERAT ED(Switch off 1 frame, Switch off 2 frames)	See TS 25.224 [22].
Burst mode parameters	0		9.2.1.4B	

#### 9.2.3.4Bb IPDL TDD parameters LCR

The *IPDL TDD Parameters LCR* IE provides the information for the IPDL Configuration applied in 1.28Mcps TDD mode.

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
IP Spacing TDD	М		ENUMERAT ED(30,40,50 , 70, 100,)	See TS 25.224 [22].
IP Start	М		INTEGER(0. .4095)	See TS 25.224 [22].
IP_Sub	М		ENUMERAT ED(First,Sec ond,Both)	See TS 25.224 [22].
Burst mode parameters	0		9.2.1.4B	

#### 9.2.3.4C 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	Μ		ENUMERAT ED(Default midamble, Common midamble, UE specific midamble,)	
Midamble Shift Long	C-UE		INTEGER(0. .15)	
Midamble Configuration LCR	М		ENUMERAT ED (2, 4, 6, 8, 10, 12, 14, 16,)	As defined in TS 25.221 [12].

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation
	Mode IE is set to "UE-specific midamble".

#### 9.2.3.4D Neighbouring TDD Cell Information LCR

Void

# 9.2.3.5 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 TS 25.225 [14].

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 TS 25.123 [24].

## 9.2.3.5a Primary CCPCH RSCP Delta

Primary CCPCH RSCP Delta is the offset used to report the negative reporting range of P-CCPCH RSCP as per TS 25.123 [24].

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.

#### 9.2.3.5A PRACH Midamble

Void.

## 9.2.3.5B RB Identity

The RB Identity is the identifier of a radio bearer. It is unique for each active Radio bearer among the active radio bearers simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RB Identity			INTEGER (031)	In line with TS 25.331 [16], ch. 10.3.4.11.

## 9.2.3.6 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 TS 25.331 [16].

[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 TS 25.331 [16].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Length			INTEGER(163 )	

#### 9.2.3.7 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 TS 25.331 [16].

[1.28Mcps TDD- When applied to configure the E-DCH Non-scheduled Grant Information, the Repetition Period represents the number of consecutiveSubframes, i.e. 5ms after which the same assignment scheme of Time Slots to a Physical Channel is repeated see TS 25.331 [16].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period			ENUMERATED	
			(1,2,4,8,16,32,6	
			4)	

#### 9.2.3.7A Rx Timing Deviation

Measured Rx Timing Deviation as a basis for timing advance, either measured directly from a RACH burst, or calculated from the Rx Timing Deviation measurement on the USCH by adding the current Timing Advance value. For 1.28Mcps TDD this IE must be set to 0.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Rx Timing Deviation			INTEGER (0127)	As specified in TS 25.435 [5], ch. 6.2.7.6.

# 9.2.3.7B Secondary CCPCH Info TDD

The *Secondary CCPCH Info TDD* IE provides information on the Secondary CCPCH that carries the logical channel SHCCH for the UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TFCS	М		9.2.1.63	For the DL.	_	
TFCI Coding	M		9.2.3.11			
Secondary CCPCH		0 <maxnr OfSCCPC Hs&gt;</maxnr 	3.2.3.11			
>Time Slot	М		9.2.1.56		_	
>Midamble Shift And Burst Type	М		9.2.3.4		_	
>TFCI Presence	М		9.2.1.55		_	
>Secondary CCPCH TDD Code Information	М		9.2.3.7C		_	
>TDD Physical Channel Offset	М		9.2.3.9		_	
>Repetition Length	М		9.2.3.6		_	
>Repetition Period	М		9.2.3.7		_	
FACH		0maxNrO fFACHs			-	
>TFS	М		9.2.1.64	For the DL.	-	
PCH		01			—	
>TFS	М		9.2.1.64	For the DL.	_	

Range bound	Explanation
maxNrOfSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH.
maxNrOfFACHs	Maximum number of FACHs mapped onto a Secondary CCPCH.

# 9.2.3.7C Secondary CCPCH TDD Code Information

The Secondary CCPCH TDD Code Information IE provides TDD Channelisation Code information for all SCCPCHs of one Time Slot.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Secondary CCPCH TDD Code Information		1 <maxnr OfSCCPC Hs&gt;</maxnr 			-	
>TDD Channelisation Code	М		9.2.3.8		_	

Range bound	Explanation
maxNrOfSCCPCHs	Maximum number of SCCPCHs for one CCTrCH.

## 9.2.3.7D 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			<i>INTEGE</i> R(1, 2,, 256)	Number of frames between special burst transmissions during DTX.

## 9.2.3.7E Synchronisation Configuration

The Synchronisation Configuration parameters that are used by the DRNS in the Radio Link Failure/Restore procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_INSYNC_IND	М		<i>INTEGE</i> R(1, 2,, 256)	
N_OUTSYNC_IND	М		<i>INTEGE</i> R(1, 2,, 256)	
T_RLFAILURE	М		ENUMERAT ED(0, 0.1, 0.2,, 25.5)	Unit: seconds.

## 9.2.3.7F Secondary CCPCH Info TDD LCR

The Secondary CCPCH Info TDD LCR IE provides information on the Secondary CCPCH that carries the logical channel SHCCH for the UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TFCS	М		9.2.1.63	For the DL.	-	
TFCI Coding	М		9.2.3.11		-	
Secondary CCPCH		0 <maxnr OfSCCPC Hs&gt;</maxnr 			-	
>Time Slot LCR	М		9.2.3.12a		-	
>Midamble Shift LCR	Μ		9.2.3.4C		-	
>TFCI Presence	М		9.2.1.55		-	
>Secondary CCPCH TDD Code Information LCR	M		9.2.3.7G		_	
>TDD Physical Channel Offset	М		9.2.3.9		_	
>Repetition Length	М		9.2.3.6		_	
>Repetition Period	М		9.2.3.7		-	
FACH		0 <maxnr OfFACHs&gt;</maxnr 			_	
>TFS	М		9.2.1.64	For the DL.	_	
РСН		01			_	
>TFS	М		9.2.1.64	For the DL.	_	

Range bound	Explanation
maxNrOfSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH.
maxNrOfFACHs	Maximum number of FACHs mapped onto a Secondary CCPCH.

# 9.2.3.7G Secondary CCPCH TDD Code Information LCR

The *Secondary CCPCH TDD Code Information LCR* IE provides LCR TDD Channelisation Code information for all SCCPCHs of one Time Slot.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Secondary CCPCH TDD Code Information		1 <maxnr OfSCCPC Hs&gt;</maxnr 			-	
>TDD Channelisation Code LCR	М		9.2.3.8a		-	
>SCCPCH Time Slot Format LCR	М		TDD DL DPCH Time Slot Format LCR 9.2.3.8E		_	

Range bound	Explanation
maxNrOfSCCPCHs	Maximum number of SCCPCHs for one CCTrCH.

# 9.2.3.7H Support of 8PSK

The Support of 8PSK IE indicates whether 8PSK is supported or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Support of 8PSK			ENUMERAT	
			ED(supported	
			)	

## 9.2.3.7I 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 TS 25.331 [16].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TDD ACK NACK Power			INTEGER (-	Unit: dB.
Offset			78,)	Range: -7+8 dB. Step: 1 dB.

#### 9.2.3.8 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),)	

#### 9.2.3.8a 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	Μ		ENUMERAT ED((1/1), (2/1), (2/2), (4/1),(4/4), (8/1), (8/8), (16/1) (16/16),)	
Modulation	М		ENUMERAT ED(QPSK, 8PSK,)	Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD.

#### 9.2.3.8A 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 Offset for each DPCH in this CCTrCH shall calculated by TDD DPCH Offset *mod* Repetition period, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Offset Type				
<pre>&gt;Initial Offset</pre>				
			INITEOED	
>>TDD DPCH Offset Value	М		INTEGER	
			(0255)	
>No Initial Offset				
>>TDD DPCH Offset Value	М		INTEGER (063)	

## 9.2.3.8B TDD DCHs To Modify

The TDD DCHs To Modify IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD DCHs To Modify		1 <maxnr OfDCHs&gt;</maxnr 			-	
>UL FP Mode	0		9.2.1.67		_	
>ToAWS	0		9.2.1.58		-	
>ToAWE	0		9.2.1.57		-	
>Transport Bearer Request Indicator	Μ		9.2.1.61		-	
>DCH Specific Info		1 <maxnr OfDCHs&gt;</maxnr 			_	
>>DCH ID	Μ		9.2.1.16		-	
>>CCTrCH ID	0		9.2.3.2	UL CCTrCH in which the DCH is mapped.	_	
>>CCTrCH ID	0		9.2.3.2	DL CCTrCH in which the DCH is mapped.	-	
>>Transport Format Set	0		9.2.1.64	For the UL.	-	
>>Transport Format Set	0		9.2.1.64	For the DL.	_	
>>Allocation/Retention Priority	0		9.2.1.1		_	
>>Frame Handling Priority	0		9.2.1.29		_	
>>Guaranteed Rate Information	0		9.2.1.30M		YES	ignore
>>Traffic Class	0		9.2.1.58A		YES	ignore
>TNL QoS	0		9.2.1.56A		YES	ignore

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

## 9.2.3.8C TDD DL Code Information

The TDD DL Code Information IE provides TDD DL Code information for all DPCHs of one DL Time Slot.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD DL Code Information		1 <maxnr OfDPCHs</maxnr 			_	
		>				
>DPCH ID	М		9.2.3.3		-	
>TDD Channelisation Code	М		9.2.3.8		_	

Range bound	Explanation
maxNrOfDPCHs	Maximum number of DPCHs for one CCTrCH.

## 9.2.3.8D TDD DL Code Information LCR

The TDD DL Code Information LCR IE provides DL Code information for the RL for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD DL Code Information LCR		1 <maxnrof DPCHsLC R&gt;</maxnrof 			_	
>DPCH ID	М		9.2.3.3		_	
>TDD Channelisation Code LCR	М		9.2.3.8a		_	
>TDD DL DPCH Time Slot Format LCR	М		9.2.3.8E		-	

Range bound	Explanation
maxNrOfDPCHsLCR	Maximum number of DPCH in one CCTrCH for 1.28Mcps TDD.

# 9.2.3.8E 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 TS 25.221 [12]).

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE Modulation				
> QPSK				
>>QPSK TDD DL DPCH	М		INTEGER	
TimeSlot Format LCR			(024,)	
> 8PSK				
>>8PSK TDD DL DPCH	М		INTEGER	
TimeSlot Format LCR			(024,)	

#### 9.2.3.9 TDD Physical Channel Offset

The TDD Physical Channel Offset represents the phase information for the allocation of a non DPCH physical channel. (CFN mod Repetition Period = TDD Physical Channel Offset) see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Physical Channel			INTEGER	
Offset			(063)	

## 9.2.3.10 TDD TPC Downlink Step Size

This parameter indicates step size for the DL power adjustment (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Downlink Step Size			ENUMERAT ED(1, 2,	Unit: dB.
			3,)	

# 9.2.3.10a TDD TPC Uplink Step Size

This parameter indicates step size for the UL power adjustment (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Uplink Step Size			ENUMERAT ED (1, 2, 3,)	Unit: dB.

#### 9.2.3.10A TDD UL Code Information

The TDD UL Code Information IE provides TDD UL Code information for all DPCHs of one UL Time Slot.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD UL Code Information		1 <maxnr OfDPCHs</maxnr 			_	
		>				
>DPCH ID	М		9.2.3.3		-	
>TDD Channelisation Code	М		9.2.3.8		-	

Range bound	Explanation
maxNrOfDPCHs	Maximum number of DPCHs for one CCTrCH.

#### 9.2.3.10B TDD UL Code Information LCR

The TDD UL Code Information LCR IE provides information for UL Code to be established for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD UL Code Information LCR		1 <maxnro fDPCHsL CR&gt;</maxnro 			_	
>DPCH ID	М		9.2.3.3		-	
>TDD Channelisation Code LCR	М		9.2.3.8a		-	
>TDD UL DPCH Time Slot Format LCR	М		9.2.3.10C		_	

Range bound	Explanation
maxNrOfDPCHsLCR	Maximum number of DPCH in one CCTrCH for 1.28Mcps TDD.

#### 9.2.3.10C 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 TS 25.221 [12]).

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE Modulation				
> QPSK				
>>QPSK TDD UL DPCH	М		INTEGER	
Time Slot Format LCR			(069,)	
> 8PSK				
>>8PSK TDD UL DPCH	М		INTEGER	
Time Slot Format LCR			(024,)	

#### 9.2.3.10D 1.28 Mcps TDD uplink physical channel capability

*1.28 Mcps TDD uplink physical channel capability* IE defines the UE uplink physical channel capability for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of timeslots per subframe	М		INTEGER (16)	
Maximum number of physical channels per timeslot	М		ENUMERATED (1,2,3,4)	

# 9.2.3.11 TFCI Coding

The TFCI Coding describes 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			ENUMERATE	
_			D(4, 8, 16,	
			32,)	

# 9.2.3.12 DL Timeslot ISCP

DL Timeslot ISCP is the measured interference in a downlink timeslot at the UE, see TS 25.225 [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot ISCP			INTEGER( 091)	According to mapping in TS 25.123 [24].

## 9.2.3.12a 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)	

## 9.2.3.12A Timing Advance Applied

Defines the need for Timing Advance functions such as Rx Timing Deviation measurement in a particular cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timing Advance Applied			ENUMERAT ED(Yes, No)	

#### 9.2.3.13 Transport Format Management

Defines whether the cell transmits the transport format information via broadcast or whether the transport format information is transmitted to the UE using dedicated RRC procedures

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Format			ENUMERAT	
Management			ED(Cell	
_			Based, UE	
			Based,)	

# 9.2.3.13A UL Timeslot ISCP

UL Timeslot ISCP is the measured interference in a uplink timeslot at the DRNS, see TS 25.225 [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot ISCP			INTEGER( 0127)	According to mapping in TS 25.123 [24].

## 9.2.3.13B 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			ENUMERAT ED(SF_Vari ation_suppor ted, SF_Variation _NOT_supp orted)	

## 9.2.3.13C UL Timeslot Information

The UL Timeslot Information IE provides information on the time slot allocation for a UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Timeslot Information		1 <maxnr OfTS&gt;</maxnr 			_	
>Time Slot	М		9.2.1.56		_	
>Midamble Shift And Burst Type	М		9.2.3.4		_	
>TFCI Presence	М		9.2.1.55		_	
>UL Code Information	М		TDD UL Code Information 9.2.3.10A		-	

Range bound	Explanation
maxNrOfTS	Maximum number of Timeslots for a UE.

#### 9.2.3.13D UL Time Slot ISCP Info

The UL Time Slot ISCP Info IE gives interference level for each UL time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Time Slot ISCP Info		1 <maxnrof ULTs&gt;</maxnrof 			-	
>Time Slot	М		9.2.1.56		_	
>UL Timeslot ISCP	М		9.2.3.13A		-	

Range bound	Explanation
maxNrOfULTs	Maximum number of uplink time slots per Radio Link.

#### 9.2.3.13E TSTD Indicator

Indicates if TSTD shall be active or not for the DL DPCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
TSTD Indicator			ENUMERAT	
			ED(active,	
			inactive)	

#### 9.2.3.13F TSTD Support Indicator

Indicates if UE support TSTD or not for DL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSTD Support Indicator			ENUMERAT ED(TSTD supported, TSTD not supported)	

#### 9.2.3.13Fa UE Measurement Hysteresis Time

The UE Measurement Hysteresis Time provides the duration during which a reporting criterion has to be fulfilled for the UE Measurement Reporting procedure to be triggered, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Hysteresis Time			INTEGER(0 15)	Unit: dB. Range: 07.5 dB. Step: 0.5 dB.

#### 9.2.3.13Fb UE Measurement Parameter Modification Allowed

Indicates if the SRNC may modify the UE measurement parameters based on its existing measurement schedule.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement			ENUMERAT	
Parameter Modification			ED	
Allowed			(Parameter	
			Modification	
			Allowed,)	

# 9.2.3.13Fc UE Measurement Report Characteristics

The UE Measurement Report Characteristics, defines how the reporting shall be performed. For definition of the event criteria see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE UE Report Characteristics				
>Periodic				
>>Amount of Reporting	М		ENUMERAT ED(1, 2, 4, 8, 16, 32, 64, infinity)	
>>Reporting Interval	M		ENUMERAT ED (250, 500, 1000, 2000, 3000, 4000, 6000, 8000, 12000, 16000, 20000, 24000, 28000, 32000, 64000)	Indicates the interval of periodical report interval in milliseconds.
>Event 1h				
>>UE Measurement Threshold	М		9.2.3.13Fd	The threshold for which the DRNS shall trigger a measurement report.
>UE Measurement Time to Trigger	Μ		9.2.3.13Fg	
>>Hysteresis	Μ		9.2.3.13Fa	
>Event 1i				
>>UE Measurement Threshold	M		9.2.3.13Fd	The threshold for which the DRNS shall trigger a measurement report.
>UE Measurement Time to Trigger	М		9.2.3.13Fg	
>>Hysteresis	Μ		9.2.3.13Fa	
>Event 6a				
>>UE Measurement Threshold	Μ		9.2.3.13Fd	
>>UE Measurement Time to Trigger	М		9.2.3.13Fg	
>Event 6b	<u>↓</u>			
>UE Measurement Threshold	М		9.2.3.13Fd	
>UE Measurement Time to Trigger	М		9.2.3.13Fg	
>Event 6c				
>UE Measurement Time to Trigger	М		9.2.3.13Fg	
>Event 6d				
>UE Measurement Time to Trigger	М		9.2.3.13Fg	

## 9.2.3.13Fd UE Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event 1h, 1i, 6a or 6b, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE UE Measurement Threshold				
>Timeslot ISCP				
>>Timeslot ISCP	М		INTEGER (-11525)	In dBm.
>UE Tx Power				
>>UE Transmitted Power	М		INTEGER(- 5033)	In dBm.

#### 9.2.3.13Fe UE Measurement Timeslot Information HCR

The *UE Measurement Time Slot Information* IE provides information for DL timeslots for the UE to measure, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Timeslot Information		1 <maxnrofts></maxnrofts>		
>Time Slot	М		9.2.1.56	
>Burst Type	М		ENUMERAT ED(Type1, Type 2, Type 3,)	

Range bound	Explanation
maxNrOfTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD.

#### 9.2.3.13Ff UE Measurement Timeslot Information LCR

The *UE Measurement Time Slot Information LCR* IE provides information for DL timeslots for the UE to measure, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Time Slot Information LCR		1 <maxnroftslcr &gt;</maxnroftslcr 		
>Time Slot LCR	М		9.2.3.12a	

	Range bound	Explanation		
F	maxNrOfTsLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.		

#### 9.2.3.13Fg UE Measurement Time to Trigger

The UE time to trigger indicates the period of time between the timing of event detection and the timing of sending Measurement Report, see TS 25.331 [16].

IE/Group I	lame	Presence	Range	IE Type and	Semantics Description
				Reference	
UE Measuremen	t Time to	М		ENUMERAT	Time in ms.
trigger				ED(0, 10, 20,	
				40, 60, 80,	
				100, 120,	

160, 200,	
240, 320,	
640, 1280,	
2560, 5000)	

#### 9.2.3.13Fh UE Measurement Type

The UE Measurement Type identifies the type of measurement that shall be performed see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Type	М		ENUMERAT	
			ED(Primary	
			CCPCH	
			RSCP, DL	
			Timeslot	
			ISCP, UE	
			Transmitted	
			Power,)	

#### 9.2.3.13Fi UE Measurement Value

The UE 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
CHOICE UE Measurement Value	М			
>UE Transmitted Power				
>>UE Transmitted Power list HCR		0 <maxnrofts></maxnrofts>		Mandatory for 3.84Mcps TDD, not applicable to 1.28Mcps TDD or 7.68Mcps TDD.
>>>Time Slot	Μ		9.2.1.56	
>>>UE Transmitted Power	М		INTEGER (0104)	According to mapping in TS 25.123 [24]. Values 020 are not used.
>>UE Transmitted Power list LCR		0< maxNrOfTsLCR>		Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.
>>>Time Slot LCR	М		9.2.3.12a	
>>>UE Transmitted Power	М		INTEGER (0104)	According to mapping in TS 25.123 [24]. Values 020 are not used.
>>UE Transmitted Power list 768		0 <maxnrofts></maxnrofts>		Mandatory for 7.68Mcps TDD, not applicable to 1.28Mcps TDD or 3.84Mcps TDD.
>>>Time Slot	Μ		9.2.1.56	
>>>UE Transmitted Power	М		INTEGER (0104)	According to mapping in TS 25.123 [24]. Values 020 are not used.
>P-CCPCH RSCP				
>>Primary CCPCH RSCP	0		9.2.3.5	According to mapping in TS 25.123 [24].
>>Primary CCPCH RSCP Delta	0		9.2.3.5a	According to mapping in TS 25.123 [24].
>DL Timeslot ISCP				
>>Timeslot list HCR		0 <maxnrofts></maxnrofts>		Mandatory for 3.84Mcps TDD, not applicable to 1.28Mcps TDD or 7.68Mcps TDD.
>>>Time Slot	М		9.2.1.56	
>>>Timeslot	М		9.2.3.12	

ISCP				
>>Timeslot list LCR		0 <maxnroftslc R&gt;</maxnroftslc 		Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.
>>>Time Slot LCR	М		9.2.3.12a	
>>>Timeslot ISCP	М		9.2.3.12	
>>Timeslot list 768		0 <maxnrofts></maxnrofts>		Mandatory for 7.68Mcps TDD, not applicable to 1.28Mcps TDD or 3.84Mcps TDD.
>>>Time Slot	М		9.2.1.56	
>>>Timeslot ISCP	М		9.2.3.12	

Range bound	Explanation
maxNrOfTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD or
	7.68Mcps TDD.
maxNrOfTsLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.

# 9.2.3.13Fj UE Measurement Value Information

The *UE Measurement Value Information* IE provides information both on whether or not the UE Measurement Value is provided in the message and if provided also the UE Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement Availability Indicator	М			
>Measurement Available				
>>UE Measurement Value	М		9.2.3.13Fi	
>Measurement not Available			NULL	

# 9.2.3.13G UL Timeslot Information LCR

The UL Timeslot Information LCR IE provides information on the timeslot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Timeslot Information LCR		1 <maxn rOfULT sLCR&gt;</maxn 			_	
>Time Slot LCR	М		9.2.3.12a		-	
>Midamble Shift LCR	М		9.2.3.4C		-	
>TFCI Presence	М		9.2.1.55		-	
>UL Code Information LCR	М		TDD UL Code Information LCR 9.2.3.10B			
>PLCCH Information	0		9.2.3.17		YES	ignore

Range bound	Explanation
maxNrOfULTsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD.

# 9.2.3.13H UL Time Slot ISCP Info LCR

The *UL Time Slot ISCP Info LCR* IE provides information for UL Interference level for each time slot within the Radio Link for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Time Slot ISCP Info		1 <maxnrofu LTsLCR&gt;</maxnrofu 			_	
>Time Slot LCR	М		9.2.3.12a		-	
>UL Timeslot ISCP	М		9.2.3.26A		-	

Range bound	Explanation
maxNrOfULTsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD.

#### 9.2.3.13I 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 frequency			INTEGER (18)	Unit: subframe, step: 1.

#### 9.2.3.13J 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.

## 9.2.3.13K Uplink Timing Advance Control LCR

The Uplink Timing Advance Control LCR indicates the parameters which are used to support Uplink Synchronisation for the UE in 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SYNC UL codes bitmap	М		BITSTRING (8)	Each bit indicates the availability of a SYNC_UL code.
FPACH info		1		
>Time Slot LCR	Μ		9.2.3.12a	
>TDD Channelisation Code LCR	Μ		9.2.3.8a	
>Midamble Shift LCR	М		9.2.3.4C	
>WT	M		INTEGER (14)	Maximum number of subframes to wait for transmission of FPACH.
PRXupPCHdes	M		INTEGER (-120 – 58,)	Desired UpPCH receive power. Unit: dBm. Step size: 1.
SYNC UL procedure parameters		1		
>Maximum Sync UL transmissions	М		ENUMERATED (1,2,4,8,)	
>Power Ramp Step	М		INTEGER (03,)	
Mmax	М		INTEGER (132)	Maximum number of synchronisation attempts.

# 9.2.3.13L USCH ID

The USCH ID is the identifier of an uplink shared channel. It is unique among the USCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
USCH ID			INTEGER (0255)	

# 9.2.3.14 USCH Information

The USCH Information IE provides information for USCHs to be established.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
USCH Information		1 to <maxnoofu SCHs&gt;</maxnoofu 			-	
>USCH ID	Μ		9.2.3.14		-	
>CCTrCH ID	M		9.2.3.2	UL CCTrCH in which the USCH is mapped	_	
>TrCH Source Statistics Descriptor	М		9.2.1.65		-	
>Transport Format Set	Μ		9.2.1.64	For USCH.	-	
>Allocation/Retention Priority	Μ		9.2.1.1		-	
>Scheduling Priority Indicator	М		9.2.1.51A		-	
>RB Info		1 <maxno OfRB&gt;</maxno 		All Radio Bearers using this USCH.	-	
>>RB Identity	Μ		9.2.3.5B		_	
>Traffic class	Μ		9.2.1.58A		YES	ignore
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.56A		YES	ignore

Range bound	Explanation
maxNoOfUSCHs	Maximum number of USCHs for one UE.
maxNoOfRB	Maximum number of Radio Bearers for one UE.

# 9.2.3.16 Support of PLCCH

The Support of PLCCH IE indicates whether PLCCH is supported or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Support of PLCCH			ENUMERAT	
			ED(supported	
			)	

# 9.2.3.17 PLCCH Information

The PLCCH Information IE carres a PLCCH assignment for a timeslot of an UL DCH-type CCTrCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code	Μ		9.2.3.8	Only QPSK modulation is used with PLCCH.
Time Slot LCR	М		9.2.3.12a	
Midamble Shift LCR	М		9.2.3.4C	
PLCCH Sequence Number	М		9.2.3.18	

#### 9.2.3.18 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)	

#### 9.2.3.19 Minimum Spreading Factor 7.68Mcps

Defines the minimum spreading factor the UE has the capability of receiving or transmitting for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Spreading Factor 768			INTEGER (132)	

#### 9.2.3.20 Maximum Number of DL Physical Channels 7.68Mcps

Defines the maximum number of physical channels for 7.68Mcps TDD – per frame that the UE is capable to receive.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of DL			INTEGER	
Physical Channels 768			(1448)	

#### 9.2.3.21 Maximum Number of DL Physical Channels per Timeslot 7.68Mcps

Defines the maximum number of physical channels per timeslot that the UE is capable to receive for 7.68 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of DL			INTEGER	
Physical Channels per			(132)	
Timeslot 768				

## 9.2.3.22 Secondary CCPCH Info 7.68Mcps TDD

The *Secondary CCPCH Info* 7.68*Mcps TDD* IE provides information on the Secondary CCPCH that carries the logical channel SHCCH for the UE for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TFCS	М		9.2.1.63	For the DL.	_	
TFCI Coding	М		9.2.3.11		_	
Secondary CCPCH		0 <maxnr OfSCCPC Hs768&gt;</maxnr 			-	
>Time Slot	М		9.2.1.56		_	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23		_	
>TFCI Presence	М		9.2.1.55		-	
>Secondary CCPCH TDD Code Information 7.68Mcps	М		9.2.3.24		_	
>TDD Physical Channel Offset	М		9.2.3.9		_	
>Repetition Length	М		9.2.3.6		_	
>Repetition Period	М		9.2.3.7		_	
FACH		0maxNrO fFACHs			_	
>TFS	М		9.2.1.64	For the DL.	-	
PCH		01			_	
>TFS	М		9.2.1.64	For the DL.	-	

Range bound	Explanation
maxNrOfSCCPCHs768	Maximum number of Secondary CCPCHs per CCTrCH.
maxNrOfFACHs	Maximum number of FACHs mapped onto a Secondary CCPCH.

#### 9.2.3.23 Midamble Shift And Burst Type 7.68Mcps

This information element indicates burst type and midamble allocation 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				
>Type 1				
>> Midamble Configuration Burst Type 1 And 3	М		ENUMERATED(4, 8, 16)	As defined in TS 25.221 [12].
>>Midamble Allocation Mode	М		ENUMERATED(Defa ult midamble, Common midamble, UE specific midamble)	
>>Midamble Shift Long	C-UE		INTEGER(015)	
>Type 2				
>> Midamble Configuration Burst Type 2	M		ENUMERATED (4, 8)	As defined in TS 25.221 [12].
>>Midamble Allocation Mode	М		ENUMERATED(Defa ult midamble, Common midamble, UE specific midamble)	
>>Midamble Shift Short	C-UE		INTEGER (07)	
>Type 3				UL only.
>> Midamble Configuration Burst Type 1 And 3	M		ENUMERATED (4, 8, 16)	As defined in TS 25.221 [12].
>>Midamble Allocation Mode	M		ENUMERATED(Defa ult midamble, UE specific midamble)	
>>Midamble Shift Long	C-UE		INTEGER(015)	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation
	Mode IE is set to "UE-specific midamble".

## 9.2.3.24 Secondary CCPCH TDD Code Information 7.68Mcps

The *Secondary CCPCH TDD Code Information 7.68Mcps* IE provides TDD Channelisation Code information for all SCCPCHs of one Time Slot for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Secondary CCPCH TDD Code Information 7.68Mcps		1 <maxnr OfSCCPC Hs768&gt;</maxnr 			-	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		_	

Range bound	Explanation
maxNrOfSCCPCHs768	Maximum number of SCCPCHs for one CCTrCH.

## 9.2.3.25 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 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), (32/1), (32,32),)	

#### 9.2.3.26 UL Timeslot Information 7.68Mcps

The UL Timeslot Information IE provides information on the time slot allocation for a UL DPCH for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Timeslot Information		1 <maxnr OfTS&gt;</maxnr 			-	
>Time Slot	М		9.2.1.56		_	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23		_	
>TFCI Presence	М		9.2.1.55		-	
>UL Code Information 7.68Mcps	М		TDD UL Code Information 7.68Mcps 9.2.3.27		_	

Range bound	Explanation		
maxNrOfTS	Maximum number of Timeslots for a UE.		

#### 9.2.3.27 TDD UL Code Information 7.68Mcps

The *TDD UL Code Information 7.68Mcps* IE provides TDD UL Code information for all DPCHs of one UL Time Slot for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD UL Code Information		1 <maxnr OfDPCHs 768&gt;</maxnr 			-	
>DPCH ID	М		9.2.3.3		-	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		—	

Range bound	Explanation
maxNrOfDPCHs768	Maximum number of DPCHs for one CCTrCH.

#### 9.2.3.28 DL Timeslot Information 7.68Mcps

The *DL Timeslot Information 7.68Mcps* IE provides information on the time slot allocation for a DL DPCH for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Timeslot Information		1 <maxnr OfTS&gt;</maxnr 			-	
>Time Slot	Μ		9.2.1.56		—	
>Midamble Shift And Burst Type 7.68Mcps	Μ		9.2.3.23		_	
>TFCI Presence	Μ		9.2.1.55		-	
>DL Code Information 7.68Mcps	М		TDD DL Code Information 7.68Mcps 9.2.3.29		_	

Range bound	Explanation		
maxNrOfTS	Maximum number of Timeslots for a UE.		

#### 9.2.3.29 TDD DL Code Information 7.68Mcps

The *TDD DL Code Information* IE provides TDD DL Code information for all DPCHs of one DL Time Slot for 7.68Mpcs TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD DL Code Information		1 <maxnr OfDPCHs 768&gt;</maxnr 			_	
>DPCH ID	М		9.2.3.3		—	
>TDD Channelisation Code 7.68Mcps	Μ		9.2.3.25		_	

Range bound	Explanation
maxNrOfDPCHs768	Maximum number of DPCHs for one CCTrCH.

## 9.2.3.30 Rx Timing Deviation 7.68Mcps

Measured Rx Timing Deviation as a basis for timing advance, either measured directly from a RACH burst, or calculated from the Rx Timing Deviation measurement on the USCH by adding the current Timing Advance value..

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Rx Timing Deviation			INTEGER	As specified in TS 25.435
			(01023)	[5].

## 9.2.3.31 Cell Capability Container 7.68 Mcps TDD

The Cell Capability Container 7.68 McpsTDD indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container TDD			BIT STRING (32)	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: Delayed Activation Support Indicator. The second bit: HS-DSCH Support Indicator. The third bit: DSCH Support Indicator. The fourth bit: Flexible MAC- d PDU Size 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.

#### 9.2.3.32 Neighbouring TDD Cell Measurement Information 7.68Mcps

This IE provides information on the 7.68Mcps 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
UTRAN Cell Identifier	М		9.2.1.71	
UARFCN	М		9.2.1.66	Corresponds to Nt TS 25.105 [7].
Cell Parameter ID	М		9.2.1.8	
Time slot	0		9.2.1.56	
Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.23	

## 9.2.3.33 UE Measurement Timeslot Information 7.68Mcps

The *UE Measurement Time Slot Information* IE provides information for DL timeslots for the UE to measure, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement		1 <maxnrofts></maxnrofts>		
Timeslot Information				
>Time Slot	М		9.2.1.56	
>Burst Type	М		ENUMERATED	
			(Type1, Type 2,	
			Type 3,)	

Range bound	Explanation
maxNrOfTS	Maximum number of Timeslots for a UE for 7.68Mcps TDD.

#### 9.2.3.34 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)	

#### 9.2.3.35 Rx Timing Deviation 3.84Mcps Extended

Measured Rx Timing Deviation as a basis for timing advance, either measured directly from a RACH burst, or calculated from the Rx Timing Deviation measurement on the USCH by adding the current Timing Advance value. This is used when the extended timing advance is in use at 3.84 Mcps.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Rx Timing Deviation			INTEGER (0511)	As specified in TS 25.435 [5].

### 9.2.3.36 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	Μ		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	Μ		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 TS 25.211 [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).

### 9.2.3.36a 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 Reference	Semantics Description	Criticality	Assigned Criticality
Minimum code rate	M		INTEGER (063)	Unit: - Range: 0.055 1. Step: 0.015.	-	
Maximum code rate	М		INTEGER (063)	Unit: - Range: 0.0551. Step: 0.015.	-	
HARQ Info for E-DCH	Μ		ENUMERAT ED (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 TS 25.211 [8].	_	
PRXdes_base	М		INTEGER (-11250)	dBm. Reference Desired RX power level for E-PUCH.	_	
E-PUCH TPC Step Size	Μ		TDD TPC Uplink Step Size 9.2.3.10a		-	
N <sub>E-UCCH</sub>	М		INTEGER (18)	Number of E- UCCH and TPC instances within an E- DCH TTI. Details are described in TS 25.221 [12].	_	
E-PUCH Power Control GAP	0		INTEGER (1255)	Unit: Number of subframes. Reference to E-PUCH Power Control for 1.28Mcps TDD in TS 25.224 [22]. If it is not present, UE shall deem it to be infinite in which case closed loop power control shall always be used.	YES	ignore

# 9.2.3.37 E-TFCS Information TDD

Whereas the related E-DCH Transport Block sizes are standardised in TS 25.425 [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 <maxnrofrefb etas&gt;</maxnrofrefb 		
>Reference Code Rate	М		INTEGER (010)	Unit: - Range: 01. Step: 0.1.
>Reference Beta	М		INTEGER( -1516)	Unit: - Range: -15+16. Step: 1 dB.
Reference Beta Information 16QAM		1 <maxnrofrefb etas&gt;</maxnrofrefb 		
>Reference Code Rate	М		INTEGER (010)	Unit: - Range: 01. Step: 0.1.
>Reference Beta	М		INTEGER( -1516)	Unit: - Range: -15+16. Step: 1 dB.

Range Bound	Explanation
maxNrOfRefBetas	Maximum number of signalled reference betas.

### 9.2.3.38 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	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 			-	
>E-DCH MAC-d Flow ID	М		9.2.1.91		-	
>Allocation/Retentio n Priority	М		9.2.1.1		-	
>TNL QoS	0		9.2.1.56A		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishmen t with ALCAP.	_	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishmen t with ALCAP.	_	
>Payload CRC Presence Indicator	М		9.2.1.42		_	
>Maximum Number Of Retransmissions For E-DCH	M		9.2.1.100		_	
>E-DCH HARQ Power Offset TDD	М		9.2.3.49		_	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89		-	
>E-DCH Grant Type	М		9.2.3.43		_	
>E-DCH Logical Channel Information	М		9.2.1.92		-	
>E-DCH MAC-d Flow Retransmission Timer	0		9.2.3.49a	Mandatory for LCR TDD. Not applicable for 3.84Mcps TDD and 7.68Mcps TDD.	YES	YES
>Traffic Class	М		9.2.1.58A		YES	ignore

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.2.3.39 E-DCH Non-scheduled Grant Information TDD

The *E-DCH Non-scheduled Grant Information TDD* IE is used to specify the details of an non-scheduled grant for 3.84Mcps and 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information	М		9.2.3.44	
Power Resource Related Information	М		9.2.3.45	
Repetition Period	М		9.2.3.6	
Repetition Length	М		9.2.3.7	
TDD E-PUCH Offset	М		9.2.3.46	
TDD Channelisation Code	М		9.2.3.8	

#### 9.2.3.39a E-DCH Non-scheduled Grant Information LCR TDD

The *E-DCH Non-scheduled Grant Information LCR TDD* IE is used to specify the details of an non-scheduled grant for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information LCR	М		9.2.3.44a	
Power Resource Related Information	М		9.2.3.45	
Repetition Period	М		9.2.3.6	
Repetition Length	М		9.2.3.7	
Subframe Number	Μ		ENUMERATED (0,1)	Used to indicate from which subframe of the Radio Frame indicated by <i>TDD E-</i> <i>PUCH Offset</i> IE the physical resources are assigned to the E-DCH Non-scheduled Grant.
TDD E-PUCH Offset	М		9.2.3.46	
TDD Channelisation Code	М		9.2.3.8	

### 9.2.3.40 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		9.2.3.47	
E-DCH Processing Overload Level	0		9.2.1.95	
E-DCH Power Offset for Scheduling Info	0		9.2.1.96	

## 9.2.3.40a E-DCH TDD Information LCR

The *E-DCH TDD Information LCR* IE specifies the details of UE physical layer category, NodeB 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	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Physical Layer Category LCR	0		9.2.3.54	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. In case of multi- carrier E-DCH, this IE indicates the capability for each carrier.	_	
E-DCH Processing Overload Level	0		9.2.1.95		-	
E-DCH Power Offset for Scheduling Info	0		9.2.1.96		-	
Extended E-DCH Physical Layer Category LCR	0		9.2.3.54A	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. In case of multi- carrier E-DCH, this IE indicates the capability for each carrier.	YES	reject
Maximum Number of Retransmission for Scheduling Info LCR	0		Maximum Number of Retransmissi ons for E- DCH 9.2.1.100		YES	ignore
E-DCH Retransmission timer for Scheduling Info LCR	0		9.2.3.49a		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
SNPL Carrier Group Indicator	0		INTEGER (13)	Applicable to 1.28Mcps TDD in multi-carrier E- DCH operation only. The absence of this IE indicates the corresponding frequency belongs to a separate SNPL carrier group which only contains this carrier. The	YES	reject

			SNPL carrier group is defined in [16].		
Multi-Carrier E-DCH Physical Layer Category LCR	0	9.2.3.54B	Applicable to 1.28Mcps TDD in multi-carrier E- DCH operation only.	YES	reject
UE TS0 Capability LCR	0	ENUMERAT ED (TS0 Capable, TS0 Non- Capable)	Applicable to 1.28Mcps TDD only.	YES	ignore

### 9.2.3.41 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
E-DCH MAC-d Flow		0 <maxnrofedc< td=""><td></td><td></td></maxnrofedc<>		
Specific Information		HMACdFlows>		
Response				
>E-DCH MAC-d Flow ID	Μ		9.2.1.91	
>Binding ID	0		9.2.1.3	
>Transport Layer Address	0		9.2.1.62	
E-AGCH Specific		0 <maxnrofeag< td=""><td></td><td></td></maxnrofeag<>		
Information Response		CHCodes>		
>Time Slot	Μ		9.2.1.56	
>Midamble Shift And	Μ		9.2.3.4	
Burst Type				
>TDD Channelisation	Μ		9.2.3.8	
Code				
E-HICH Information		01		
Response				
>Time Slot	Μ		9.2.1.56	
>Midamble Shift And	Μ		9.2.3.4	
Burst Type				
>TDD Channelisation	М		9.2.3.8	
Code				
>E-HICH Time Offset	М		9.2.3.48	
E-DCH Non-scheduled	0		9.2.3.39	
Grant Information TDD				
E-RNTI	0		9.2.1.94	

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of MAC-d flows.
maxNrOfEAGCHCodes	Maximum number of E-AGCHs assigned to one UE.

### 9.2.3.41a E-DCH TDD Information Response 1.28Mcps

Only for 1.28Mcps TDD. The *E-DCH TDD Information Response 1.28Mcps* 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
E-DCH MAC-d Flow		0 <maxnrofedc< td=""><td>Reference</td><td></td></maxnrofedc<>	Reference	
Specific Information		HMACdFlows>		
Response				
>E-DCH MAC-d Flow ID	М		9.2.1.91	
>Binding ID	0		9.2.1.3	
>Transport Layer	0		9.2.1.62	
Address				
E-AGCH Specific		0 <maxnrofeag< td=""><td></td><td></td></maxnrofeag<>		
Information Response		CHCodes>		
>Time Slot LCR	М		9.2.3.12a	
>Midamble Shift LCR	М		9.2.3.4C	
>TDD Channelisation	Μ		9.2.3.8	
Code				
E-HICH Scheduled		01		
specific Information				
Response				
>Scheduled		0<		
		maxNrOfEHICHC		
		odes>		
>>El	M		INTEGER (03)	E-HICH indication which is used to indicate UE on which E-HICH the feedback info is carried.
>>Time Slot LCR	М		9.2.3.12a	
>>Midamble Shift LCR	М		9.2.3.4C	
>>TDD Channelisation	Μ		9.2.3.8	
Code				
>Non-Scheduled		01		
>>Time Slot LCR	Μ		9.2.3.12a	
>>Midamble Shift LCR	Μ		9.2.3.4C	
>>TDD Channelisation	M		9.2.3.8	
Code				
>>Signature Sequence	М		INTEGER	
Group Index			(019)	
>E-HICH time offset LCR	M		9.2.3.48a	
E-DCH Non-scheduled	0		9.2.3.39a	
Grant Information LCR				
TDD	0		0.04.04	
E-RNTI	0		9.2.1.94	

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of MAC-d flows.
maxNrOfEAGCHCodes	Maximum number of E-AGCHs assigned to one UE.
maxNrOfEHICHCodes	Maximum number of E-HICHs assigned to one UE.

# 9.2.3.42 E-DCH TDD Information to Modify

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	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 			_	
>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>Allocation/Retention Priority	0		9.2.1.1		_	
>Transport Bearer Request Indicator	Μ		9.2.1.61		-	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.56A		_	
>Maximum Number Of Retransmissions For E-DCH	0		9.2.1.100		_	
>E-DCH HARQ Power Offset TDD	0		9.2.3.49		_	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89		_	
>E-DCH Grant Type	0		9.2.3.43		-	
>E-DCH Logical Channel To Add	0		E-DCH Logical Channel Information 9.2.1.92		_	
>E-DCH Logical Channel To Modify	0		9.2.1.93		_	
>E-DCH Logical Channel To Delete		0< maxNoOfL ogicalCha nnels>			_	
>>Logical Channel ID	М		9.2.1.97		_	
>E-DCH MAC-d Flow Retransmission Timer	0		9.2.3.49a	Applicable for 1.28Mcps TDD only.	YES	ignore
>Traffic Class	0		9.2.1.58A		YES	ignore
MAC-e Reset Indicator	0		9.2.1.99		_	
E-DCH MAC-d PDU Size Format	0		9.2.1.91A		YES	reject
UE TS0 Capability LCR	0		ENUMERATE D (TS0 Capable, TS0 Non-Capable)	Applicable to 1.28Mcps TDD only.	YES	ignore

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxNoOfLogicalChannels	Maximum number of logical channels.

# 9.2.3.43 E-DCH Grant Type

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)	

### 9.2.3.44 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 Information			BIT STRING (13)	

#### 9.2.3.44a Timeslot Resource Related Information LCR

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)	

#### 9.2.3.45 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			INTEGER	
Information			(132)	

### 9.2.3.46 E-PUCH Offset

The *E-PUCH Offset* represents the CFN offset at which an non-scheduled E-DCH grant begins.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-PUCH Offset			INTEGER	
			(0255)	

### 9.2.3.47 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			INTEGER	Bitrate on transport block
Bitrate			(09201,)	level. Unit is kbits per
				second.

#### 9.2.3.48 E-HICH Time Offset

The E-HICH Time Offset ( aka n<sub>E-HICH</sub> (TS 25.221 [12]))is determined by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Time Offset			INTEGER (444)	

#### 9.2.3.48a E-HICH Time Offset LCR

The E-HICH Time Offset LCR IE(aka n<sub>E-HICH</sub> (TS 25.221 [12]))is determined by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Time Offset LCR			INTEGER (415)	

# 9.2.3.49 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)	

#### 9.2.3.49a E-DCH MAC-d Flow Retransmission Timer

The *E-DCH MAC-d Flow Retransmission Timer* IE is used in the E-DCH retransmission control as defined in TS 25.425 [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Retransmission Timer			ENUMERATED (10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 110, 120, 140, 160, 200, 240, 280, 320, 400, 480, 560,)	Unit: ms. Node B may use this value to stop the re-transmission of the corresponding MAC-e PDU.

#### 9.2.3.50 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 an non-scheduled grant for TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information	М		9.2.3.44	
Power Resource Related Information	М		9.2.3.45	
Repetition Period	М		9.2.3.6	
Repetition Length	М		9.2.3.7	
TDD E-PUCH Offset	М		9.2.3.46	
TDD Channelisation Code 7.68Mcps	М		9.2.3.25	

# 9.2.3.51 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		9.2.3.53	
E-DCH Processing Overload Level	0		9.2.1.95	
E-DCH Power Offset for Scheduling Info	0		9.2.1.96	

# 9.2.3.52 E-DCH TDD Information Response 7.68Mcps

The *E-DCH TDD Information Response* 7.68*Mcps* IE provides information for E-DCH MAC-d flows that have been established or modified for 7.68Mcps TDD. It also provides additional E-DCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Specific Information Response		0 <maxnrofedc HMACdFlows&gt;</maxnrofedc 		
>E-DCH MAC-d Flow ID	М		9.2.1.91	
>Binding ID	0		9.2.1.3	
>Transport Layer Address	0		9.2.1.62	
E-AGCH Specific Information Response 7.68Mcps		0 <maxnrofeag CHCodes&gt;</maxnrofeag 		
>Time Slot	М		9.2.1.56	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25	
E-HICH Information Response 7.68Mcps		01		
>Time Slot	Μ		9.2.1.56	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25	
>E-HICH Time Offset	М		9.2.3.48	
E-DCH Non-scheduled Grant Information 7.68Mcps TDD	0		9.2.3.50	
E-RNTI	0		9.2.1.94	

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxNrOfEAGCHCodes	Maximum number of E-AGCHs assigned to one UE.

# 9.2.3.53 E-DCH TDD Maximum Bitrate 7.68Mcps

The *E-DCH TDD Maximum Bitrate* 7.68*Mcps* 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			INTEGER	Bitrate on transport block
Bitrate 7.68Mcps			(017713,)	level. Unit is kbits per
				second.

# 9.2.3.54 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 Category LCR			INTEGER (15)	As defined in TS 25.306 [42].

#### 9.2.3.54A 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 TS 25.306 [42].

#### 9.2.3.54B Multi-Carrier E-DCH Physical Layer Category LCR

Only for 1.28Mcps TDD. The *Multi-Carrier E-DCH Physical Layer Category LCR* IE parameter indicates the E-DCH physical layer capability of UE in multi-carrier E-DCH operation mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multi-Carrier E-DCH Physical Layer Category LCR			INTEGER (18,)	As defined in [42].

# 9.2.3.55 UpPCH Information LCR

Only for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UpPCH Information LCR		1 <maxfr equencyin Cell&gt;</maxfr 			EACH	ignore
>UARFCN	0		9.2.1.66		-	
>UpPCH Position LCR	0		9.2.3.56		_	

Range Bound	Explanation		
maxFrequencyinCell	Maximum number of Frequency that can be defined in a Cell.		

### 9.2.3.56 UpPCH Position LCR

Only for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UpPCH Position LCR			INTEGER (1127)	

#### 9.2.3.57 Common E-DCH MAC-d Flow ID

The Common E-DCH MAC-d Flow ID 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			INTEGER	
Flow ID			(0255)	

# 9.2.3.58 Common E-DCH MAC-d Flow Specific Information LCR

The *Common E-DCH MAC-d Flow Specific Information LCR* IE provides information associated to Common E-DCH MAC-d Flow used for Common E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flow Specific Information LCR		1 <maxnrofedc HMACdFlowsLCR &gt;</maxnrofedc 		
>Common E-DCH MAC- d Flow ID	М		9.2.3.57	
>Maximum Number Of Retransmissions For E- DCH	M		9.2.1.100	
>E-DCH HARQ Power Offset TDD	М		9.2.3.49	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89	
>Common E-DCH Logical Channel information	М	1 <maxnooflogi calChannels&gt;</maxnooflogi 		
>>Logical Channel ID	Μ		9.2.1.97	
>>Maximum MAC-d PDU Size Extended	М		MAC PDU Size Extended 9.2.1.34D	

Range bound	Explanation
maxNrOfEDCHMACdFlowsLCR	Maximum number of E-DCH MAC-d Flows for 1.28Mcps TDD.
maxNoOfLogicalChannels	Maximum number of logical channels.

#### 9.2.3.59 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 LCR			INTEGER (0 256,000,000, )	Unit: bit/s.

#### 9.2.3.60 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. See TS 36.133 [64].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
К	М		INTEGER (23)	The actual idle interval period $= 2^{k}$ .
Offset	М		INTEGER (07)	The idle interval position in the period.

#### 9.2.3.61 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 TS 25.224 [22]).

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	М		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	М		INTEGER (063)	Units of subframes. Offset of the UE DRX cycles at the given TTI.	-	
>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	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.	-	

# 9.2.3.62 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		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames.	-	
CHOICE DRX Information To Modify	0					
>Modify						
>>HS-SCCH DRX Information		01				
>>>UE DRX Cycle	М		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	М		INTEGER (063)	Units of subframes. Offset of the UE DRX cycles at the given TTI.	-	
>>>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	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		-	

### 9.2.3.63 Continuous Packet Connectivity DRX Information Response LCR

DRNS uses the *Continuous Packet Connectivity DRX Information Response LCR* IE to inform the SRNS the parameters used for Continuous Packet Connectivity DRX operation for 1.28 Mcps TDD (see TS 25.224 [22]). Continuous Packet Connectivity DRX related parameters shall be configured by SRNS. For the parameters which can be accepted by DRNS, the DRNS 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 DRNS, the DRNS 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		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames.	-	
HS-SCCH DRX Information		01				
>UE DRX Cycle	0		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	0		INTEGER (063)	Units of subframes. Offset of the UE DRX cycles at the given TTI.	-	
>Inactivity Threshold for UE DRX Cycle Ext	0		ENUMERATED(128, 256,512,)	Units of subframes. This IE can only be used when the Inactivity Threshold for UE DRX Cycle Ext is included in the request message, otherwise, the IE shall not be used.	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.	-	

# 9.2.3.64 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 TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		1< maxNoOfT BSs- Mapping- HS-DSCH- SPS >		
>Transport Block Size maping Index	М		INTEGER (0 maxNoOfTBSs- Mapping-HS-DSCH- SPS-1)	Corresponds to the <i>Transport-block size information</i> field carried on HS-SCCH (see TS 25.222 [46]).
>Transport Block Size Index	М		INTEGER (1 maxNoOfHS-DSCH- TBSsLCR)	Corresponds to the <i>TB index</i> in the related Transport Block Size table (see TS 25.425 [32]).
Repetition Period list		1 <maxno< td=""><td></td><td></td></maxno<>		

		OfRepetiti on-Period-		
		LCR>		
>Repetition Period Index	M	LUK>	INTEGER (0 maxNoOfRepetition- Period-LCR-1)	Corresponds to the <i>Resource</i> repetition period index field carried on HS-SCCH (see TS 25.222 [46]).
>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.
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 used. Bit 0 is for logical channel 0, Bit 1 is for logical channel 1, Value '1' for a bit means that the HS-DSCH Semi-Persistent operation is allowed. Bit 0 is the first/leftmost bit of the bit string.
>> Priority Queue level			BIT STRING (8)	Indicates the Priority Queues for which the HS-DSCH Semi- Persistent operation is intended to be used. Bit 0 is for priority queue 0, Bit 1 is for priority queue 1, Value '1' for a bit means that the HS-DSCH Semi-Persistent operation is allowed. Bit 0 is the first/leftmost bit of the bit string.

Range Bound	Explanation
maxNoOfHS-DSCH-TBSsLCR	Maximum number of HS-DSCH Transport Block Sizes.
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.
maxNoOfTBSs-Mapping-HS-DSCH-SPS	Maximum number of Transport Block Size mapping index on HS-SCCH.

#### 9.2.3.65 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 TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		0< maxNoOfT BSs- Mapping- HS-DSCH- SPS >		

	1			
> Transport Block Size maping Index	M		INTEGER (0 maxNoOfTBSs- Mapping-HS-DSCH- SPS-1)	Corresponds to the <i>Transport- block size information</i> field carried on HS-SCCH (see TS 25.222 [46]).
>Transport Block Size Index	М		INTEGER (1 maxNoOfHS-DSCH- TBSsLCR)	Corresponds to the <i>TB index</i> in the related Transport Block Size table (see TS 25.425 [32]).
Repetition Period list		0 <maxno OfRepetiti on-Period- LCR&gt;</maxno 		
>Repetition Period Index	М		INTEGER (0 maxNoOfRepetition- Period-LCR)	Corresponds to the <i>Resource</i> repetition period index field carried on HS-SCCH (see TS 25.222 [46]).
>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 Semi- Persistent HS-DSCH Resource is required to be reserved and be informed via response message.
HS-DSCH Semi-Persistent scheduling operation Indicator		01		
>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 used. Bit 0 is for logical channel 0, Bit1 is for logical channel 1, Value '1' for a bit means that the HS-DSCH Semi-Persistent operation is allowed. Bit 0 is the first/leftmost bit of the bit string.
>> Priority Queue level			BIT STRING (8)	Indicates the Priority Queues for which the HS-DSCH Semi- Persistent operation is intended to be used. Bit 0 is for prority queue 0, Bit1 is for priority queue 1, Value '1' for a bit means that the HS-DSCH Semi-Persistent operation is allowed. Bit 0 is the first/leftmost bit of the bit string.

Range Bound	Explanation
maxNoOfHS-DSCH-TBSsLCR	Maximum number of HS-DSCH Transport Block Sizes.
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.
maxNoOfTBSs-Mapping-HS-DSCH-SPS	Maximum number of Transport Block Size mapping index on HS-SCCH.

# 9.2.3.66 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 TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period list		1 <maxn oOfRepetit ion- Period- LCR&gt;</maxn 		
>Repetition Period Index	M		INTEGER (0 maxNoOfRepetition- Period-LCR-1)	
>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.
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. Bit 0 is for logical channel 0, Bit1 is for logical channel 1, Value '1' for a bit means that the HS-DSCH Semi-Persistent operation is allowed. Bit 0 is the first/leftmost bit of the bit string.
E-DCH Semi-Persistent Resource Reservation Indicator	0		ENUMERATED(Res erve)	Reserve means the E-DCH Semi-Persistent Resource is required to be reserved and be informed via response message.

Range Bound	Explanation
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.

# 9.2.3.67 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 TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period list		0 <maxn oOfRepetit ion- Period- LCR&gt;</maxn 		
>Repetition Period Index	M		INTEGER (0 maxNoOfRepetition- Period-LCR-1)	
>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.
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. Bit 0 is for logical channel 0, Bit1 is for logical channel 1, Value '1' for a bit means that the HS-DSCH Semi-Persistent operation is allowed. Bit 0 is

			the first/leftmost bit of the bit string.
E-DCH Semi-Persistent Resource Reservation Indicator	0	ENUMERATED(Res erve)	Reserve means the E-DCH Semi-Persistent Resource is required to be reserved and be informed via response message.

Range Bound	Explanation
Range Bound	Explanation
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.

# 9.2.3.68 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 TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SICH information for HS- DSCH Semi-Persistent Scheduling operation		1< maxNoOf- HS-SICH- SPS>		
>HS-SICH mapping index	М		INTEGER (0 maxNoOf-HS-SICH- SPS-1)	
>CHIOCE HS-SICH type				
>>HS-SCCH associated HS- SICH				
>>>HS-SICH ID	М		HS SICH ID 9.2.3.3ad	
>>Non-HS-SCCH associated HS-SICH				
>>>Time Slot LCR	М		9.2.3.12a	
>>>Midamble shift LCR	М		9.2.3.4C	
>>>TDD Channelisation Code	М		9.2.3.8	
Allcoated HS-PDSCH Semi- persistent resource		01		
>Repetition Period Index	М		INTEGER (0 maxNoOfRepetition- Period-LCR-1)	
>Repetition Length for HS- PDSCH Semi-persistent Resouce	0		INTEGER (163))	Absence means Repetition Length equal to 1.
>HS-PDSCH offset	М		INTEGER (063))	Units of subframes.
>HS-PDSCH Midamble Configuation	М		Midamble Shift LCR 9.2.3.7A	
>Timeslot Resource Related Information	М		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 the bit string.
>Start Code	М		TDD Channelisation Code 9.2.3.19	
>End Code	М		TDD Channelisation Code 9.2.3.19	
>Transport Block Size Index	М		INTEGER (0 maxNoOfTBSs-	

		Mapping-HS-DSCH- SPS-1)	
>Modulation type	M	ENUMERATED (QPSK, 16QAM)	
>HS-SICH mapping index	М	INTEGER (0 maxNoOf-HS-SICH- SPS-1)	
Buffer Size for HS-DSCH Semi-Persistent scheduling	0	ENUMERATED (800304000,)	Indicats the buffer size that shall be reserved for HS- DSCH semi-persistent 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)	

Range Bound	Explanation						
maxNoOf-HS-SICH-SPS	Maximum number of HS-SICH for HS-DSCH Semi-Persistent scheduling operation.						
maxNoOfTBSs-Mapping-HS-DSCH-SPS	Maximum number of Transport Block Size mapping index on HS-SCCH.						
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.						

# 9.2.3.69 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 TS 25.2243 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Allcoated E-DCH Semi- persistent resource		01		
>Timeslot Resource Related Information LCR	М		9.2.3.54a	
>Power Resource Related Information	М		9.2.3.45	
>Repetition Period Index	М		INTEGER (0 maxNoOfRepetition- Period-LCR-1)	
>Repetition Length	М		INTEGER (163))	Absence means Repetition Length equal to 1.
>Subframe Number	М		ENUMERATED ( 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	Μ		9.2.3.46	
>TDD Channelisation Code	М		9.2.3.19	
>NE-UCCH	M		INTEGER (18)	Number of E-UCCH and TPC instances within an E-DCH TTI. Details are described in TS 25.221 [12].
E-DCH SPS E-HICH information		01		

>CHOICE E-HICH configuration	М		
>>same as scheduled E- HICH			
>>> EI		INTEGER (03)	
>>explicit			
>>>Time Slot LCR	М	9.2.3.12a	
>>>Midamble Shift LCR	М	9.2.3.4C	
>>>TDD Channelisation Code	М	9.2.3.8	
>Signature Sequence Group Index	М	INTEGER (019)	

Range Bound	Explanation
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.

#### 9.2.3.70 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 Indicator	М		NULL	

#### 9.2.3.71 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	М		NULL	

#### 9.2.3.72 HS-SICH Reference Signal Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Midamble Configuration LCR	M		ENUMERATE D (2, 4, 6, 8, 10, 12, 14, 16, )	As defined in TS 25.221 [12].		
Midamble Shift	М		INTEGER (015)			
Time Slot LCR	М		9.2.3.12a			

#### 9.2.3.73 Cell Portion LCR ID

Cell Portion LCR ID is the unique identifier for a cell portion within a cell for 1.28 Mcps TDD. See TS 25.225 [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Portion LCR ID			INTEGER	
			(0255,)	

#### 9.2.3.74 TS0 HS-PDSCH Indication LCR

Only for 1.28Mcps TDD. The *TSO HS-PDSCH Indication LCR* IE indicates the first bit of timeslot information included in the HS-SCCH can be used to allocate the HS-PDSCH resources on TSO.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TS0 HS-PDSCH Indication LCR			NULL	

### 9.2.3.75 DCH Measurement Occasion Information

The *DCH Measurement Occasion Information* IE indicates Measurement Occasion Information used for interfrequency/ inter-RAT measurements in CELL\_DCH state for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CELL_DCH measurement occasion pattern sequence		1 to <maxnr OfDCHM easurem entOcca sionPatt ernSequ ence&gt;</maxnr 		
>Pattern sequence identifier	М		Integer(1 maxNrOfDCH Measurement OccasionPatte rnSequence)	
>Status Flag	М		Enumerated(a ctivate, deactivate)	This flag indicates whether the measurement occasion pattern sequence shall be activated or deactivated.
>Measurement purpose	0		BIT STRING (5)	Measurement Purpose. Bit 0 is for Inter- frequency measurement. Bit 1 is for GSM carrier RSSI measurement. Bit 2 is for Initial BSIC identification. Bit 3 is for BSIC re- confirmation. Bit 4 is for E-UTRA measurement. The value 1 of a bit means that the measurement occasion pattern sequence is applicable for the corresponding type of measurement. Bit 0 is the first/leftmost bit of the bit string.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
>Measurement occasion pattern sequence parameters	0			
>>k	М		Integer(19)	CELL_DCH measurement occasion cycle length coefficient. The actual measurement occasion period equal to 2k radio frames. Value 0 indicates continuous allocation.
>>Offset	Μ		Integer(0511)	In frames. The measurement occasion position in the measurement period.
>>M_Length	M		Integer(1512)	The measurement occasion length in frames starting from the Offset.
>>Timeslot Bitmap	M		Bit string (7)	Bitmap indicating which of the timeslot(s) is/are allocated for measurement. Bit 0 is for timeslot 0. Bit 1 is for timeslot 1. Bit 2 is for timeslot 2. Bit 3 is for timeslot 3. Bit 4 is for timeslot 4. Bit 5 is for timeslot 5. Bit 6 is for timeslot 6. The value 0 of a bit means the corresponding timeslot is not used for measurement. The value 1 of a bit means the corresponding timeslot is used for measurement. Bit 0 is the first/leftmost bit of the bit string.

Condition	Explanation
Measurementoccasionpatternsequence parameters	The IE shall be present if <i>Measurement occasion</i> pattern sequence parameters IE is present.

Range Bound	Explanation
maxNrOfDCHMeasurementOccasionPatternSequen ce	Maximum number of measurement occasion pattern sequence

# 9.2.3.76 DCH Measurement Type Indicator

The *DCH Measurement Type Indicator* IE indicates the measurement type(s) which the DRNS shall configured for the UE in CELL\_DCH state for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
---------------	----------	-------	--------------------------	-----------------------

Presence	Range	IE Type and	Semantics Description
		Reference	
M		BIT STRING (5)	Measurement type. Bit 0 is for Inter-frequency measurement. Bit 1 is for GSM carrier RSSI measurement. Bit 2 is for Initial BSIC identification. Bit 3 is for BSIC re- confirmation. Bit 4 is for E-UTRA measurement. The value 1 of a bit means that the measurement occasion pattern sequence should be configured for the corresponding type of measurement. Bit 0 is the first/leftmost bit of the bit string.
			M BIT STRING

# 9.2.3.77 Multi-Carrier E-DCH Information LCR

The *Multi-Carrier E-DCH Information LCR* IE defines the parameters used for Multi-Carrier E-DCH operation for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multi-Carrier E-DCH Information		1 <maxnrofu LCarriersLCR- 1&gt;</maxnrofu 		
>UARFCN	М		9.2.1.66	Corresponds to Nt (3GPP TS 25.105).
>SNPL Carrier Group Indicator	0		INTEGER (13)	Indicates to which SNPL carrier Group this frequency belongs. The absence of this IE indicates the corresponding frequency belongs to a separate SNPL carrier group which only contains this carrier. The SNPL carrier Group is defined in TS 25.331 [16].
>PRXdes_base	М		INTEGER (-11250)	dBm. Reference Desired RX power level for E-PUCH.
> Multi-Carrier E-DCH TDD MAC-d Flow Specific Information		0 <maxnrofe DCHMACdFlo ws&gt;</maxnrofe 		Shall be ignored if bearer establishment with ALCAP. Shall be present only if the Separate lur transport bearer mode is used.
>>E-DCH MAC-d Flow ID	М		9.2.1.91	
>>Binding ID	М		9.2.1.3	
>>Transport Layer Address	М		9.2.1.62	

Range Bound	Explanation
maxNrOfULCarriersLCR	Maximum number of uplink frequencis in Multi-Carrier E-DCH
	Operation.
maxNrOfEDCHMACdFlows	Maximum number of MAC-d flows.

# 9.2.3.78 Multi-Carrier E-DCH Information Response LCR

The *Multi-Carrier E-DCH Information Response LCR* IE provides information for E-DCH MAC-d flows that determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multi-Carrier E-DCH Information Response		1 <maxnrofu LCarriersLCR- 1&gt;</maxnrofu 		
>UARFCN	М		9.2.1.66	Corresponds to Nt (3GPP TS 25.105).
>E-DCH TDD MAC-d Flow Specific Information Response		0 <maxnrofe DCHMACdFlo ws&gt;</maxnrofe 		
>>E-DCH MAC-d Flow ID	М		9.2.1.91	
>>Binding ID	0		9.2.1.3	
>>Transport Layer Address	0		9.2.1.62	
>E-AGCH Specific Information Response		0 <maxnrofe AGCHCodes&gt;</maxnrofe 		
>>Time Slot LCR	М		9.2.3.12a	
>>Midamble Shift LCR	М		9.2.3.4C	
>>TDD Channelisation Code	М		9.2.3.8	
>E-HICH Scheduled specific Information Response		0< maxNrOfEHIC HCodes>		
>>EI	М		INTEGER (03)	E-HICH indication which is used to indicate UE on which E-HICH the feedback info is carried.
>>Time Slot LCR	М		9.2.3.12a	
>>Midamble Shift LCR	Μ		9.2.3.4C	
>>TDD Channelisation Code	М		9.2.3.8	

Range bound	Explanation
maxNrOfULCarriersLCR	Maximum number of uplink frequencis in Multi-Carrier E-DCH
	Operation.
maxNrOfEDCHMACdFlows	Maximum number of MAC-d flows.
maxNrOfEAGCHCodes	Maximum number of E-AGCHs assigned to one UE.
maxNrOfEHICHCodes	Maximum number of E-HICHs assigned to one UE.

# 9.2.3.79 Multi-Carrier E-DCH Transport Bearer Mode LCR

This parameter indicates the Multicarrier E-DCH Transport Bearer Mode. For *Multi-Carrier E-DCH Transport Bearer Mode LCR* = " Separate Iur transport bearer mode" the Mac-d flows from each carrier uses different Iur transport bearers, for *Multi-Carrier E-DCH Transport Bearer Mode LCR* = " E-DCH UL flow multiplexing mode " the Mac-d flow received on the different carriers in the DRNS is multiplexed on one Iur transport bearer.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multicarrier E-DCH Transport			ENUMERATED	
Bearer Mode			(Separate lur transport bearer mode,E-DCH UL flow multiplexing mode,)	

# 9.2.3.80 Cell Capability Container Extension TDD LCR

The *Cell Capability Container Extension TDD LCR* IE is an extension to the *Cell Capability Container TDD LCR* IE and indicates the cell capability in the same way as *Cell Capability Container TDD LCR* IE.

The Cell Capability Container Extension TDD LCR IE indicates the cell capability of Multi-Carrier related functions.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Cell Capability Container Extension TDD LCR			BIT STRING (32)	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: Multi-Carrier E-DCH Operation Support Indicator. This bit shall be ignored by the SRNC if the second bit: Separate Iur Transport Bearer Support Indicator = "0" and the third bit: E-DCH UL Flow Multiplexing Support Indicator = "0". The second bit: Separate Iur Transport Bearer Support Indicator, /Multi-carrier/. This bit shall be ignored by the SRNC if the first bit: Multi-Carrier E-DCH Operation Support Indicator = "0". The third bit: E-DCH UL flow multiplexing mode Indicator, /Multi- carrier/. This bit shall be ignored by the SRNC if the first bit: Multi-Carrier E-DCH Operation Support Indicator = "0". The third bit: E-DCH UL flow multiplexing mode Indicator, /Multi- carrier/. This bit shall be ignored by the SRNC if the first bit: Multi-Carrier E-DCH Operation Support Indicator = "0". 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.

# 9.2.3.81 MU-MIMO Information

The *MU-MIMO Information* IE defines the parameters used for MU-MIMO operation for 1.28 Mcps TDD (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MU-MIMO Operation	M		ENUMERATED (MU-MIMO Used, MU-MIMO Not Used)	
Standalone Midamble Channel Information		01		
>Standalone Midamble Configuration	M		ENUMERATED (2, 4, 6, 8, 10, 12, 14, 16,)	As defined in TS 25.221 [12].
>Standalone Midamble Shift	Μ		INTEGER (015)	
>Time Slot LCR	Μ		9.2.3.12a	
>Repetition Period	М		ENUMERATED (1, 2,4, 8, 16, 32, 64)	Units of subframes.
>Offset	Μ		INTEGER (063)	Units of subframes.
>Reference Beta	C-E-DCH		INTEGER (-1516)	Unit range -15db to +16db.

Condition	Explanation
E-DCH	This IE shall be present if IE "E-DCH Information 1.28Mcps" is present. Otherwise it is not needed.

#### 9.2.3.82 MU-MIMO Indicator

The *MU-MIMO Indicator* IE indicates the DRNC can use MU-MIMO on UL and/or DL. It also indicates that whether Standalone Midamble Channel should be used or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MU-MIMO Usage Indicator	Μ		ENUMERATED (UL Only, DL Only, UL and DL)	
Standalone Midamble Channel indicator	М		ENUMERATED (Used, Not Used)	

# 9.2.3.83 M2 Report

This IE defines the parameters for a M2 report, TDD report of UE radio measurements

IE/Group Name	Presence	Range	IE type and reference	Semantics description
M2 Report				
>CHOICE Report trigger	Μ			
>>Periodic				
>>>MDT Report	Μ		9.2.1.140	
Parameters				
>>Event11				
>>>threshold	Μ		INTEGER(-12025)	

# 9.2.3.84 UE RF Band Capability LCR

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE RF Band Capability Info		1< maxFreqB andsTDD>		
>UE RF Band Capability	М		ENUMERATED (a,b,c,d,e,f,g,h,i,j,k,l, m,n,o,p,)	Corresponds to the radio bands definition (TS 25.105 [7]).

Range Bound	Explanation
maxFreqBandsTDD	Maximum number of Frequency bands for TDD.

# 9.3 Message and Information Element Abstract Syntax (with ASN.1)

# 9.3.0 General

RNSAP ASN.1 definition conforms with ITU-T Rec. X.680 [18] and ITU-T Rec. X.681 [19].

Subclause 9.3 presents the Abstract Syntax of RNSAP protocol with ASN.1. In case there is contradiction between the ASN.1 definition in this subclause and the tabular format in subclause 9.1 and 9.2, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, in which the tabular format shall take precedence.

The ASN.1 definition specifies the structure and content of RNSAP messages. RNSAP 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 RNSAP message according to the PDU definitions module and with the following additional rules:

- 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 in which 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.
- NOTE: In the above "IE" means an IE in the object set with an explicit ID. If one IE needs to appear more than once in one object set, then the different occurrences have different IE IDs.

If a RNSAP 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 multivendor 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

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- -

-- Elementary Procedure definitions

#### 

RNSAP-PDU-Descriptions {
 itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
 umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-PDU-Descriptions (0) }

#### DEFINITIONS AUTOMATIC TAGS ::=

#### BEGIN

 **********
 IE parameter types from other modules.
 * * * * * * * * * * * * * * * * * * * *

#### IMPORTS

Criticality, ProcedureID, TransactionID FROM RNSAP-CommonDataTypes

> CommonMeasurementFailureIndication, CommonMeasurementInitiationFailure, CommonMeasurementInitiationRequest, CommonMeasurementInitiationResponse, CommonMeasurementReport, CommonMeasurementTerminationRequest, CommonTransportChannelResourcesFailure, CommonTransportChannelResourcesRequest, CommonTransportChannelResourcesReleaseRequest, CommonTransportChannelResourcesResponseFDD, CommonTransportChannelResourcesResponseTDD, CompressedModeCommand, DedicatedMeasurementFailureIndication, DedicatedMeasurementInitiationFailure, DedicatedMeasurementInitiationReguest, DedicatedMeasurementInitiationResponse, DedicatedMeasurementReport, DedicatedMeasurementTerminationRequest, DirectInformationTransfer, DL-PowerControlRequest, DL-PowerTimeslotControlRequest, DownlinkSignallingTransferRequest, ErrorIndication. EnhancedRelocationCancel, EnhancedRelocationFailure, EnhancedRelocationRequest, EnhancedRelocationResponse, EnhancedRelocationSignallingTransfer, EnhancedRelocationRelease,

EnhancedRelocationResourceRequest, EnhancedRelocationResourceResponse, EnhancedRelocationResourceFailure. EnhancedRelocationResourceReleaseCommand, EnhancedRelocationResourceReleaseComplete, InformationExchangeFailureIndication, InformationExchangeInitiationFailure, InformationExchangeInitiationReguest, InformationExchangeInitiationResponse, InformationExchangeTerminationRequest, InformationReport, InformationTransferControlRequest, IurDeactivateTrace. IurInvokeTrace. MBMSAttachCommand, MBMSDetachCommand, MBSFNMCCHInformation, PagingRequest, PhysicalChannelReconfigurationCommand, PhysicalChannelReconfigurationFailure, PhysicalChannelReconfigurationRequestFDD, PhysicalChannelReconfigurationRequestTDD, PrivateMessage, RadioLinkActivationCommandFDD, RadioLinkActivationCommandTDD, RadioLinkAdditionFailureFDD, RadioLinkAdditionFailureTDD, RadioLinkAdditionRequestFDD, RadioLinkAdditionReguestTDD, RadioLinkAdditionResponseFDD, RadioLinkAdditionResponseTDD, RadioLinkCongestionIndication, RadioLinkDeletionRequest, RadioLinkDeletionResponse, RadioLinkFailureIndication, RadioLinkParameterUpdateIndicationFDD, RadioLinkParameterUpdateIndicationTDD, RadioLinkPreemptionRequiredIndication, RadioLinkReconfigurationCancel, RadioLinkReconfigurationCommit, RadioLinkReconfigurationFailure, RadioLinkReconfigurationPrepareFDD, RadioLinkReconfigurationPrepareTDD, RadioLinkReconfigurationReadyFDD, RadioLinkReconfigurationReadvTDD, RadioLinkReconfigurationRequestFDD, RadioLinkReconfigurationReguestTDD, RadioLinkReconfigurationResponseFDD, RadioLinkReconfigurationResponseTDD, RadioLinkRestoreIndication, RadioLinkSetupFailureFDD, RadioLinkSetupFailureTDD, RadioLinkSetupRequestFDD, RadioLinkSetupRequestTDD,

RadioLinkSetupResponseFDD, RadioLinkSetupResponseTDD, RelocationCommit. ResetRequest, ResetResponse, UEMeasurementFailureIndication, UEMeasurementInitiationFailure, UEMeasurementInitiationRequest, UEMeasurementInitiationResponse, UEMeasurementReport, UEMeasurementTerminationRequest, SecondaryULFrequencyReport, SecondaryULFrequencyUpdateIndication, UplinkSignallingTransferIndicationFDD, UplinkSignallingTransferIndicationTDD, GERANUplinkSignallingTransferIndication FROM RNSAP-PDU-Contents id-commonMeasurementFailure, id-commonMeasurementInitiation, id-commonMeasurementReporting, id-commonMeasurementTermination, id-commonTransportChannelResourcesInitialisation, id-commonTransportChannelResourcesRelease, id-compressedModeCommand, id-downlinkPowerControl, id-downlinkSignallingTransfer, id-downlinkPowerTimeslotControl, id-enhancedRelocation, id-enhancedRelocationCancel, id-enhancedRelocationSignallingTransfer, id-enhancedRelocationRelease, id-errorIndication, id-informationExchangeFailure, id-informationExchangeInitiation, id-informationReporting, id-informationExchangeTermination, id-informationTransferControl, id-iurDeactivateTrace, id-iurInvokeTrace, id-dedicatedMeasurementFailure, id-dedicatedMeasurementInitiation, id-dedicatedMeasurementReporting, id-dedicatedMeasurementTermination, id-directInformationTransfer, id-mBMSAttach, id-mBMSDetach, id-mBSFNMCCHInformation, id-paging, id-physicalChannelReconfiguration, id-privateMessage, id-radioLinkActivation, id-radioLinkAddition,

id-radioLinkCongestion,

id-radioLinkDeletion, id-radioLinkFailure. id-radioLinkParameterUpdate, id-radioLinkPreemption, id-radioLinkRestoration, id-radioLinkSetup, id-relocationCommit, id-reset, id-synchronisedRadioLinkReconfigurationCancellation, id-synchronisedRadioLinkReconfigurationCommit, id-synchronisedRadioLinkReconfigurationPreparation, id-uEMeasurementFailure, id-uEMeasurementInitiation, id-uEMeasurementReporting, id-uEMeasurementTermination, id-secondaryULFrequencyReporting, id-secondaryULFrequencyUpdate, id-unSynchronisedRadioLinkReconfiguration, id-uplinkSignallingTransfer, id-gERANuplinkSignallingTransfer, id-enhancedRelocationResourceAllocation, id-enhancedRelocationResourceRelease

#### FROM RNSAP-Constants;

```
******
- -
-- Interface Elementary Procedure Class
- -
       RNSAP-ELEMENTARY-PROCEDURE ::= CLASS {
  &InitiatingMessage
  &SuccessfulOutcome
                         OPTIONAL,
  &UnsuccessfulOutcome
                            OPTIONAL,
  &Outcome
                      OPTIONAL,
                   ProcedureID
  &procedureID
                               UNIQUE,
   &criticality
                    Criticality
                               DEFAULT ignore
WITH SYNTAX {
   INITIATING MESSAGE
                    &InitiatingMessage
                    &SuccessfulOutcome]
   [SUCCESSFUL OUTCOME
   [UNSUCCESSFUL OUTCOME
                       &UnsuccessfulOutcome]
   [OUTCOME
                 &Outcome]
   PROCEDURE ID
                    &procedureID
                    &criticality]
   [CRITICALITY
}
   **********
- -
-- Interface PDU Definition
- -
```

```
RNSAP-PDU ::= CHOICE {
   initiatingMessage InitiatingMessage,
    successfulOutcome SuccessfulOutcome.
   unsuccessfulOutcome UnsuccessfulOutcome,
   outcome
                  Outcome.
    . . .
InitiatingMessage ::= SEQUENCE
    procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                         ({RNSAP-ELEMENTARY-PROCEDURES}),
    criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
                                                         ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    transactionID TransactionID,
                                                             ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
               RNSAP-ELEMENTARY-PROCEDURE.&InitiatingMessage
SuccessfulOutcome ::= SEQUENCE
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                         ({RNSAP-ELEMENTARY-PROCEDURES}),
                                                         ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
    transactionID TransactionID,
                                                             ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
               RNSAP-ELEMENTARY-PROCEDURE.&SuccessfulOutcome
UnsuccessfulOutcome ::= SEQUENCE {
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                         ({RNSAP-ELEMENTARY-PROCEDURES}),
                                                         ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
    transactionID TransactionID,
    value
               RNSAP-ELEMENTARY-PROCEDURE.&UnsuccessfulOutcome ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
Outcome ::= SEQUENCE {
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                         ({RNSAP-ELEMENTARY-PROCEDURES}),
    criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
                                                         ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    transactionID TransactionID,
               RNSAP-ELEMENTARY-PROCEDURE.&Outcome
                                                     ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
        *****
-- Interface Elementary Procedure List
RNSAP-ELEMENTARY-PROCEDURES RNSAP-ELEMENTARY-PROCEDURE ::= {
    RNSAP-ELEMENTARY-PROCEDURES-CLASS-1
   RNSAP-ELEMENTARY-PROCEDURES-CLASS-2
   RNSAP-ELEMENTARY-PROCEDURES-CLASS-3
    . . .
}
RNSAP-ELEMENTARY-PROCEDURES-CLASS-1 RNSAP-ELEMENTARY-PROCEDURE ::= {
    radioLinkSetupFDD
    radioLinkSetupTDD
    radioLinkAdditionFDD
    radioLinkAdditionTDD
```

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radioLinkDeletion

synchronisedRadioLinkReconfigurationPreparationFDD synchronisedRadioLinkReconfigurationPreparationTDD unSynchronisedRadioLinkReconfigurationFDD unSynchronisedRadioLinkReconfigurationTDD physicalChannelReconfigurationFDD physicalChannelReconfigurationTDD dedicatedMeasurementInitiation commonTransportChannelResourcesInitialisationFDD commonTransportChannelResourcesInitialisationTDD . . . , commonMeasurementInitiation informationExchangeInitiation reset uEMeasurementInitiation enhancedRelocation enhancedRelocationResourceAllocation enhancedRelocationResourceRelease RNSAP-ELEMENTARY-PROCEDURES-CLASS-2 RNSAP-ELEMENTARY-PROCEDURE ::= { uplinkSignallingTransferFDD

uplinkSignallingTransferTDD downlinkSignallingTransfer relocationCommit paging synchronisedRadioLinkReconfigurationCommit synchronisedRadioLinkReconfigurationCancellation radioLinkFailure radioLinkPreemption radioLinkRestoration dedicatedMeasurementReporting dedicatedMeasurementTermination dedicatedMeasurementFailure downlinkPowerControlFDD downlinkPowerTimeslotControl compressedModeCommandFDD commonTransportChannelResourcesRelease errorIndication privateMessage

#### · · · ,

radioLinkCongestion commonMeasurementFailure commonMeasurementFailure commonMeasurementTermination informationExchangeFailure informationExchangeTermination informationReporting radioLinkActivationFDD radioLinkActivationTDD gERANuplinkSignallingTransfer radioLinkParameterUpdateFDD radioLinkParameterUpdateTDD uEMeasurementReporting

```
uEMeasurementTermination
    uEMeasurementFailure
    iurInvokeTrace
    iurDeactivateTrace
    mBMSAttach
    mBMSDetach
    directInformationTransfer
    enhancedRelocationCancel
    enhancedRelocationSignallingTransfer
    enhancedRelocationRelease
    mBSFNMCCHInformation
    secondaryULFrequencyReportingFDD
    secondaryULFrequencyUpdateFDD
    informationTransferControl
RNSAP-ELEMENTARY-PROCEDURES-CLASS-3 RNSAP-ELEMENTARY-PROCEDURE ::= {
```

}

```
. . .
    - -
-- Interface Elementary Procedures
- -
radioLinkSetupFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
   INITIATING MESSAGE RadioLinkSetupRequestFDD
   SUCCESSFUL OUTCOME RadioLinkSetupResponseFDD
   UNSUCCESSFUL OUTCOME
                        RadioLinkSetupFailureFDD
                     { procedureCode id-radioLinkSetup, ddMode fdd }
   PROCEDURE ID
   CRITICALITY
                 reject
}
radioLinkSetupTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
   INITIATING MESSAGE RadioLinkSetupRequestTDD
   SUCCESSFUL OUTCOME RadioLinkSetupResponseTDD
                        RadioLinkSetupFailureTDD
   UNSUCCESSFUL OUTCOME
   PROCEDURE ID
                     { procedureCode id-radioLinkSetup, ddMode tdd }
   CRITICALITY
                 reject
}
radioLinkAdditionFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
   INITIATING MESSAGE RadioLinkAdditionRequestFDD
   SUCCESSFUL OUTCOME RadioLinkAdditionResponseFDD
                        RadioLinkAdditionFailureFDD
   UNSUCCESSFUL OUTCOME
                     { procedureCode id-radioLinkAddition , ddMode fdd }
   PROCEDURE ID
   CRITICALITY
                 reject
```

```
radioLinkAdditionTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkAdditionRequestTDD
    SUCCESSFUL OUTCOME RadioLinkAdditionResponseTDD
    UNSUCCESSFUL OUTCOME
                           RadioLinkAdditionFailureTDD
    PROCEDURE ID
                        { procedureCode id-radioLinkAddition , ddMode tdd }
    CRITICALITY
                    reject
radioLinkDeletion RNSAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE RadioLinkDeletionRequest
    SUCCESSFUL OUTCOME RadioLinkDeletionResponse
    PROCEDURE ID
                        { procedureCode id-radioLinkDeletion, ddMode common }
    CRITICALITY
                    reject
synchronisedRadioLinkReconfigurationPreparationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationPrepareFDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationReadyFDD
                           RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
                        { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                    reject
synchronisedRadioLinkReconfigurationPreparationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationPrepareTDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationReadyTDD
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    PROCEDURE ID
                        { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
    CRITICALITY
                    reject
J
unSynchronisedRadioLinkReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationRequestFDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationResponseFDD
                           RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
                        { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                    reject
}
unSynchronisedRadioLinkReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationRequestTDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationResponseTDD
    UNSUCCESSFUL OUTCOME
                           RadioLinkReconfigurationFailure
                        { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    reiect
physicalChannelReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE PhysicalChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME PhysicalChannelReconfigurationCommand
                            PhysicalChannelReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    PROCEDURE ID
                        { procedureCode id-physicalChannelReconfiguration, ddMode fdd
    CRITICALITY
                    reject
```

```
physicalChannelReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::= ·
    INITIATING MESSAGE PhysicalChannelReconfigurationReguestTDD
    SUCCESSFUL OUTCOME PhysicalChannelReconfigurationCommand
    UNSUCCESSFUL OUTCOME
                            PhysicalChannelReconfigurationFailure
                        { procedureCode id-physicalChannelReconfiguration, ddMode tdd
    PROCEDURE ID
    CRITICALITY
                    reject
dedicatedMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementInitiationRequest
    SUCCESSFUL OUTCOME DedicatedMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME
                            DedicatedMeasurementInitiationFailure
    PROCEDURE ID
                        { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
    CRITICALITY
                    reject
3
commonTransportChannelResourcesInitialisationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonTransportChannelResourcesRequest
    SUCCESSFUL OUTCOME CommonTransportChannelResourcesResponseFDD
    UNSUCCESSFUL OUTCOME
                            CommonTransportChannelResourcesFailure
                        { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                    reject
commonTransportChannelResourcesInitialisationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonTransportChannelResourcesRequest
    SUCCESSFUL OUTCOME CommonTransportChannelResourcesResponseTDD
                            CommonTransportChannelResourcesFailure
    UNSUCCESSFUL OUTCOME
                        { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    reject
uplinkSignallingTransferFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UplinkSignallingTransferIndicationFDD
    PROCEDURE ID
                        { procedureCode id-uplinkSignallingTransfer, ddMode fdd }
    CRITICALITY
                    ignore
}
uplinkSignallingTransferTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UplinkSignallingTransferIndicationTDD
    PROCEDURE ID
                        { procedureCode id-uplinkSignallingTransfer, ddMode tdd }
    CRITICALITY
                    ignore
}
downlinkSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= ·
    INITIATING MESSAGE DownlinkSignallingTransferRequest
    PROCEDURE ID
                        { procedureCode id-downlinkSignallingTransfer, ddMode common }
    CRITICALITY
                    ignore
relocationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RelocationCommit
    PROCEDURE ID
                        { procedureCode id-relocationCommit, ddMode common }
```

```
CRITICALITY
                    ignore
}
paging RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE PagingRequest
                        { procedureCode id-paging, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
}
synchronisedRadioLinkReconfigurationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationCommit
    PROCEDURE ID
                        { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    CRITICALITY
                    ignore
synchronisedRadioLinkReconfigurationCancellation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationCancel
                        { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
3
radioLinkFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkFailureIndication
    PROCEDURE ID
                        { procedureCode id-radioLinkFailure, ddMode common }
    CRITICALITY
                    ignore
}
radioLinkPreemption RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkPreemptionRequiredIndication
                        { procedureCode id-radioLinkPreemption, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
radioLinkRestoration RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkRestoreIndication
    PROCEDURE ID
                        { procedureCode id-radioLinkRestoration, ddMode common }
    CRITICALITY
                    ignore
}
dedicatedMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementReport
                        { procedureCode id-dedicatedMeasurementReporting, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
}
dedicatedMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE DedicatedMeasurementTerminationRequest
    PROCEDURE ID
                        { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    CRITICALITY
                    ignore
}
dedicatedMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementFailureIndication
                        { procedureCode id-dedicatedMeasurementFailure, ddMode common
    PROCEDURE ID
```

```
CRITICALITY
                    ignore
3
radioLinkCongestion RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkCongestionIndication
                        { procedureCode id-radioLinkCongestion, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
}
downlinkPowerControlFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DL-PowerControlRequest
    PROCEDURE ID
                        { procedureCode id-downlinkPowerControl, ddMode fdd }
    CRITICALITY
                    ignore
downlinkPowerTimeslotControl RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DL-PowerTimeslotControlReguest
                        { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    ignore
3
compressedModeCommandFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CompressedModeCommand
    PROCEDURE ID
                        { procedureCode id-compressedModeCommand, ddMode fdd }
    CRITICALITY
                    ignore
}
commonTransportChannelResourcesRelease RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonTransportChannelResourcesReleaseRequest
                        { procedureCode id-commonTransportChannelResourcesRelease, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
errorIndication RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE ErrorIndication
    PROCEDURE ID
                        { procedureCode id-errorIndication, ddMode common }
    CRITICALITY
                    ignore
}
commonMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementInitiationRequest
    SUCCESSFUL OUTCOME
                            CommonMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME
                            CommonMeasurementInitiationFailure
    PROCEDURE ID
                            { procedureCode id-commonMeasurementInitiation, ddMode common }
                            reject
    CRITICALITY
commonMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonMeasurementReport
    PROCEDURE ID
                        { procedureCode id-commonMeasurementReporting, ddMode common }
    CRITICALITY
                        ignore
}
commonMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
```

```
INITIATING MESSAGE CommonMeasurementTerminationRequest
    PROCEDURE ID
                        { procedureCode id-commonMeasurementTermination, ddMode common }
    CRITICALITY
                    ignore
commonMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonMeasurementFailureIndication
    PROCEDURE ID
                        { procedureCode id-commonMeasurementFailure, ddMode common }
    CRITICALITY
                    ignore
}
informationExchangeInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeInitiationReguest
    SUCCESSFUL OUTCOME
                            InformationExchangeInitiationResponse
                            InformationExchangeInitiationFailure
    UNSUCCESSFUL OUTCOME
    PROCEDURE ID
                            { procedureCode id-informationExchangeInitiation, ddMode common
    CRITICALITY
                            reject
informationReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationReport
    PROCEDURE ID
                            { procedureCode id-informationReporting, ddMode common }
    CRITICALITY
                            iqnore
informationExchangeTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
                            InformationExchangeTerminationReguest
    INITIATING MESSAGE
    PROCEDURE ID
                            { procedureCode id-informationExchangeTermination, ddMode common
    CRITICALITY
                            ignore
}
informationExchangeFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeFailureIndication
    PROCEDURE ID
                            { procedureCode id-informationExchangeFailure, ddMode common }
    CRITICALITY
                            ignore
privateMessage RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE PrivateMessage
    PROCEDURE ID
                        { procedureCode id-privateMessage, ddMode common }
    CRITICALITY
                    ignore
reset RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ResetRequest
    SUCCESSFUL OUTCOME
                            ResetResponse
    PROCEDURE ID
                            { procedureCode id-reset, ddMode common
    CRITICALITY
                            reject
}
radioLinkActivationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkActivationCommandFDD
    PROCEDURE ID
                            { procedureCode id-radioLinkActivation, ddMode fdd
```

```
CRITICALITY
                            ignore
۱
radioLinkActivationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkActivationCommandTDD
                            { procedureCode id-radioLinkActivation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
}
gERANuplinkSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE GERANUplinkSignallingTransferIndication
                        { procedureCode id-qERANuplinkSignallingTransfer, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
radioLinkParameterUpdateFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkParameterUpdateIndicationFDD
    INITIATING MESSAGE
                            { procedureCode id-radioLinkParameterUpdate, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
3
radioLinkParameterUpdateTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkParameterUpdateIndicationTDD
                            { procedureCode id-radioLinkParameterUpdate, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
}
uEMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UEMeasurementInitiationReguest
    SUCCESSFUL OUTCOME UEMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME
                            UEMeasurementInitiationFailure
    PROCEDURE ID
                        { procedureCode id-uEMeasurementInitiation, ddMode tdd }
    CRITICALITY
                    reject
}
uEMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UEMeasurementReport
    PROCEDURE ID
                        { procedureCode id-uEMeasurementReporting, ddMode tdd }
    CRITICALITY
                    ignore
}
uEMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UEMeasurementTerminationRequest
                        { procedureCode id-uEMeasurementTermination, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    ignore
uEMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UEMeasurementFailureIndication
                        { procedureCode id-uEMeasurementFailure, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    ignore
}
iurInvokeTrace RNSAP-ELEMENTARY-PROCEDURE ::= {
```

```
INITIATING MESSAGE IurInvokeTrace
    PROCEDURE ID
                        { procedureCode id-iurInvokeTrace, ddMode common }
    CRITICALITY
                        ignore
iurDeactivateTrace RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE IurDeactivateTrace
    PROCEDURE ID
                        { procedureCode id-iurDeactivateTrace, ddMode common }
    CRITICALITY
                        ignore
}
mBMSAttach RNSAP-ELEMENTARY-PROCEDURE ::= {
                            MBMSAttachCommand
    INITIATING MESSAGE
    PROCEDURE ID
                              procedureCode id-mBMSAttach, ddMode common
    CRITICALITY
                            ignore
3
mBMSDetach RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            MBMSDetachCommand
                              procedureCode id-mBMSDetach, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
directInformationTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
                            DirectInformationTransfer
    INITIATING MESSAGE
    PROCEDURE ID
                            { procedureCode id-directInformationTransfer, ddMode common }
    CRITICALITY
                            ignore
enhancedRelocation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE EnhancedRelocationRequest
    SUCCESSFUL OUTCOME EnhancedRelocationResponse
    UNSUCCESSFUL OUTCOME
                            EnhancedRelocationFailure
                        { procedureCode id-enhancedRelocation, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    reject
enhancedRelocationCancel RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            EnhancedRelocationCancel
    PROCEDURE ID
                            { procedureCode id-enhancedRelocationCancel, ddMode common }
    CRITICALITY
                            ignore
}
enhancedRelocationSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            EnhancedRelocationSignallingTransfer
                            { procedureCode id-enhancedRelocationSignallingTransfer, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
}
enhancedRelocationRelease RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            EnhancedRelocationRelease
    PROCEDURE ID
                              procedureCode id-enhancedRelocationRelease, ddMode common }
    CRITICALITY
                            ignore
```

```
mBSFNMCCHInformation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            MBSFNMCCHInformation
    PROCEDURE ID
                            { procedureCode id-mBSFNMCCHInformation, ddMode common }
    CRITICALITY
                            reject
3
secondaryULFrequencyReportingFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            SecondaryULFrequencyReport
                            { procedureCode id-secondaryULFrequencyReporting, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
}
secondaryULFrequencyUpdateFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            SecondaryULFrequencyUpdateIndication
    PROCEDURE ID
                            { procedureCode id-secondaryULFrequencyUpdate, ddMode fdd }
    CRITICALITY
                            ignore
enhancedRelocationResourceAllocation RNSAP-ELEMENTARY-PROCEDURE ::= {
                            EnhancedRelocationResourceRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            EnhancedRelocationResourceResponse
    UNSUCCESSFUL OUTCOME
                            EnhancedRelocationResourceFailure
                            { procedureCode id-enhancedRelocationResourceAllocation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
enhancedRelocationResourceRelease RNSAP-ELEMENTARY-PROCEDURE ::= ·
    INITIATING MESSAGE
                            EnhancedRelocationResourceReleaseCommand
                            EnhancedRelocationResourceReleaseComplete
    SUCCESSFUL OUTCOME
                            { procedureCode id-enhancedRelocationResourceRelease, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
informationTransferControl RNSAP-ELEMENTARY-PROCEDURE ::= {
                            InformationTransferControlRequest
    INITIATING MESSAGE
    PROCEDURE ID
                            { procedureCode id-informationTransferControl, ddMode common }
    CRITICALITY
                            ignore
}
END
```

# 9.3.3 PDU Definitions

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DEFINITIONS AUTOMATIC TAGS ::= BEGIN - --- IE parameter types from other modules. - -IMPORTS Active-Pattern-Sequence-Information, Active-MBMS-Bearer-Service-ListFDD, Active-MBMS-Bearer-Service-ListFDD-PFL, Active-MBMS-Bearer-Service-ListTDD, Active-MBMS-Bearer-Service-ListTDD-PFL, AllocationRetentionPriority, AllowedOueuingTime, Allowed-Rate-Information, AlphaValue, AlternativeFormatReportingIndicator, AntennaColocationIndicator, BLER, SCTD-Indicator, BindingID, C-ID, C-RNTI, CCTrCH-ID, CFN, CGI, ClosedLoopMode1-SupportIndicator, Closedlooptimingadjustmentmode, CN-CS-DomainIdentifier, CN-PS-DomainIdentifier, CNDomainType, Cause, CellCapabilityContainer-FDD, CellCapabilityContainerExtension-FDD, CellCapabilityContainer-TDD, CellCapabilityContainer-TDD-LCR, CellCapabilityContainer-TDD768, CellParameterID, CellPortionID, ChipOffset, CommonMeasurementAccuracy, CommonMeasurementType, CommonMeasurementValue, CommonMeasurementValueInformation, CommonTransportChannelResourcesInitialisationNotRequired, Common-EDCH-MAC-d-Flow-Specific-InformationFDD, Common-EDCH-Support-Indicator, CongestionCause, Continuous-Packet-Connectivity-DTX-DRX-Information,

Continuous-Packet-Connectivity-HS-SCCH-Less-Information,

Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response, CPC-Information. CoverageIndicator, CriticalityDiagnostics, CellPortionLCRID, D-RNTI, D-RNTI-ReleaseIndication, DCH-FDD-Information, DCH-ID, DCH-Indicator-For-E-DCH-HSDPA-Operation, DPCH-ID768, DCH-InformationResponse, DCH-TDD-Information, DL-DPCH-SlotFormat. DL-TimeslotISCP, DL-Power. DL-PowerBalancing-Information, DL-PowerBalancing-ActivationIndicator, DL-PowerBalancing-UpdatedIndicator, DL-ReferencePowerInformation, DL-ScramblingCode, DL-Timeslot-Information, DL-Timeslot-Information768, DL-TimeslotLCR-Information, DL-TimeSlot-ISCP-Info, DL-TimeSlot-ISCP-LCR-Information, DPC-Mode, DPC-Mode-Change-SupportIndicator, DPCH-ID, DL-DPCH-TimingAdjustment, DRXCycleLengthCoefficient, DedicatedMeasurementType, DedicatedMeasurementValue, DedicatedMeasurementValueInformation, DelavedActivation, DelayedActivationUpdate, DiversityControlField, DiversityMode, DSCH-FlowControlInformation, DSCH-FlowControlItem, DSCH-TDD-Information, DSCH-ID, DSCH-RNTI, EDCH-FDD-Information, EDCH-FDD-InformationResponse, EDCH-FDD-Information-To-Modify, EDCH-FDD-DL-ControlChannelInformation, EDCH-DDI-Value, EDCH-MACdFlow-ID, EDCH-MACdFlow-Specific-InfoList, EDCH-MACdFlows-To-Delete, EDCH-MACdFlows-Information, EDCH-RL-Indication, EDCH-Serving-RL,

E-DCH-Serving-cell-change-informationResponse, EDPCH-Information-FDD, EDPCH-Information-RLReconfPrepare-FDD, EDPCH-Information-RLReconfRequest-FDD, E-DCH-FDD-Update-Information, E-DPCCH-PO, E-RGCH-2-IndexStepThreshold, E-RGCH-3-IndexStepThreshold, E-RNTI, E-TFCS-Information, E-TTI, Enhanced-FACH-Support-Indicator, Enhanced-FACH-Information-ResponseFDD, Enhanced-PCH-Capability, ExtendedPropagationDelay, Extended-RNC-ID, Extended-RNTI, Extended-S-RNTI-Group, SchedulingPriorityIndicator, Enhanced-PrimaryCPICH-EcNo, F-DPCH-SlotFormat, F-DPCH-SlotFormatSupportRequest, FACH-FlowControlInformation, Fast-Reconfiguration-Mode, Fast-Reconfiguration-Permission, FDD-DCHs-to-Modify, FDD-DL-ChannelisationCodeNumber, FDD-DL-CodeInformation, FDD-TPC-DownlinkStepSize, FirstRLS-Indicator, FNReportingIndicator, FrameHandlingPriority, FrameOffset, GA-AccessPointPosition, GA-Cell, GA-CellAdditionalShapes, HARQ-Info-for-E-DCH, HCS-Prio, HSDSCH-Configured-Indicator, HSDSCH-FDD-Information, HSDSCH-FDD-Information-Response, HSDSCH-FDD-Update-Information, HSDSCH-TDD-Update-Information, HSDSCH-Information-to-Modify, HSDSCH-Information-to-Modify-Unsynchronised, HSDSCH-MACdFlow-ID, HSDSCH-MACdFlows-Information, HSDSCH-MACdFlows-to-Delete, HSDSCH-Physical-Layer-Category, HSDSCH-RNTI, HS-DSCH-serving-cell-change-information, HS-DSCH-serving-cell-change-informationResponse, HSDSCH-TDD-Information, HSDSCH-TDD-Information-Response,

HS-SICH-ID, IMSI. InformationExchangeID. InformationReportCharacteristics, InformationType, Initial-DL-DPCH-TimingAdjustment-Allowed, InnerLoopDLPCStatus, Inter-Frequency-Cell-List, L3-Information, LimitedPowerIncrease, MaximumAllowedULTxPower, MaxNrDLPhysicalchannels, MaxNrDLPhysicalchannelsTS, MaxNrDLPhysicalchannels768, MaxNrDLPhysicalchannelsTS768, MaxNrOfUL-DPCHs, MaxNrTimeslots, MaxNrULPhysicalchannels, MACes-Guaranteed-Bitrate, MaxNr-Retransmissions-EDCH, Max-Set-E-DPDCHs, Max-UE-DTX-Cycle, MeasurementFilterCoefficient, MeasurementID, MeasurementRecoveryBehavior, MeasurementRecoveryReportingIndicator, MeasurementRecoverySupportIndicator, MBMS-Bearer-Service-List, MBSFN-Cluster-Identity, MCCH-Configuration-Info, MCCH-Message-List, MBSFN-Scheduling-Transmission-Time-Interval-Info-List, MidambleAllocationMode, MidambleShiftAndBurstType, MidambleShiftAndBurstTvpe768, MidambleShiftLCR, MinimumSpreadingFactor, MinimumSpreadingFactor768, MinUL-ChannelisationCodeLength, Multiple-PLMN-List, MultiplexingPosition, NeighbouringFDDCellMeasurementInformation, NeighbouringTDDCellMeasurementInformation, NeighbouringTDDCellMeasurementInformation768, Neighbouring-GSM-CellInformation, Neighbouring-UMTS-CellInformation, NeighbouringTDDCellMeasurementInformationLCR, Neighbouring-E-UTRA-CellInformation, NrOfDLchannelisationcodes, PagingCause, PagingRecordType, PartialReportingIndicator, PayloadCRC-PresenceIndicator, PCCPCH-Power,

PC-Preamble, Permanent-NAS-UE-Identity, Phase-Reference-Update-Indicator, PowerAdjustmentType, PowerOffset. PrimaryCCPCH-RSCP, PrimaryCPICH-EcNo, PrimaryCPICH-Power, Primary-CPICH-Usage-For-Channel-Estimation, PrimaryScramblingCode, PropagationDelay, ProvidedInformation, PunctureLimit, OE-Selector, RANAP-EnhancedRelocationInformationRequest, RANAP-EnhancedRelocationInformationResponse, RANAP-RelocationInformation, RB-Info, Released-CN-Domain, RL-ID, RL-Set-ID, RL-Specific-EDCH-Information, RNC-ID, RepetitionLength, RepetitionPeriod, ReportCharacteristics, Received-total-wide-band-power, RequestedDataValue, RequestedDataValueInformation, RL-Specific-DCH-Info, RxTimingDeviationForTA, RxTimingDeviationForTA768, S-RNTI, S-RNTI-Group, SCH-TimeSlot, SAI, SFN, Secondary-CCPCH-Info-TDD, Secondary-CCPCH-Info-TDD768, Secondary-CCPCH-System-Information-MBMS, Secondary-CPICH-Information, Secondary-CPICH-Information-Change, Secondary-LCR-CCPCH-Info-TDD, Secondary-Serving-Cell-List, SNA-Information, SpecialBurstScheduling, SSDT-SupportIndicator, STTD-SupportIndicator, AdjustmentPeriod, ScaledAdjustmentRatio, MaxAdjustmentStep, SRB-Delay, Support-8PSK, SyncCase,

SynchronisationConfiguration, SixtyfourOAM-DL-SupportIndicator, TDD-ChannelisationCode, TDD-ChannelisationCode768, TDD-DCHs-to-Modify, TDD-DL-Code-Information, TDD-DPCHOffset, TDD-PhysicalChannelOffset, TDD-TPC-DownlinkStepSize, TDD-ChannelisationCodeLCR, TDD-DL-Code-LCR-Information, TDD-DL-Code-Information768, TDD-UL-Code-Information, TDD-UL-Code-LCR-Information, TDD-UL-Code-Information768, TFCI-Coding, TFCI-Presence, TFCI-SignallingMode, TimeSlot, TimeSlotLCR, TimingAdvanceApplied, TMGI, TnlQos, TOAWE, TOAWS, TraceDepth, TraceRecordingSessionReference, TraceReference, TrafficClass, TransmitDiversityIndicator, TransportBearerID, TransportBearerRequestIndicator, TFCS, Transmission-Gap-Pattern-Sequence-Information, TransportFormatManagement, TransportFormatSet, TransportLayerAddress, TrCH-SrcStatisticsDescr, TSTD-Indicator, TSTD-Support-Indicator, UARFCN, UC-ID, UE-AggregateMaximumBitRate, UEIdentity, UEMeasurementType, UEMeasurementTimeslotInfoHCR, UEMeasurementTimeslotInfoLCR, UEMeasurementTimeslotInfo768, UEMeasurementReportCharacteristics, UEMeasurementParameterModAllow, UEMeasurementValueInformation, UE-State, UL-DPCCH-SlotFormat, UL-DPDCHIndicatorEDCH,

UL-SIR, UL-FP-Mode. UL-PhysCH-SF-Variation, UL-ScramblingCode, UL-Timeslot-Information. UL-Timeslot-Information768, UL-TimeslotLCR-Information, UL-TimeSlot-ISCP-Info, UL-TimeSlot-ISCP-LCR-Info, URA-ID, URA-Information, USCH-ID, USCH-Information. UL-Synchronisation-Parameters-LCR, TDD-DL-DPCH-TimeSlotFormat-LCR, TDD-UL-DPCH-TimeSlotFormat-LCR, MAChs-ResetIndicator, UL-TimingAdvanceCtrl-LCR, TDD-TPC-UplinkStepSize-LCR, PrimaryCCPCH-RSCP-Delta, SynchronisationIndicator, Support-PLCCH, PLCCHinformation, RxTimingDeviationForTAext, E-DCH-Information, E-DCH-Information-Reconfig, E-DCH-Information-Response, E-DCH-768-Information, E-DCH-768-Information-Reconfig, E-DCH-768-Information-Response, E-DCH-LCR-Information, E-DCH-LCR-Information-Reconfig, E-DCH-LCR-Information-Response, ControlGAP, IdleIntervalInformation, NeedforIdleInterval, HS-SICH-ID-Extension, TSN-Length, UPPCHPositionLCR, Common-EDCH-MAC-d-Flow-Specific-InformationLCR, Enhanced-FACH-Information-ResponseLCR, 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, MinimumReducedE-DPDCH-GainFactor,

ContinuousPacketConnectivity-DRX-InformationLCR, ContinuousPacketConnectivity-DRX-Information-ResponseLCR, CPC-InformationLCR. E-DCH-Semi-PersistentScheduling-Information-LCR, HS-DSCH-Semi-PersistentScheduling-Information-LCR, HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR, E-DCH-Semi-PersistentScheduling-Information-ResponseLCR, RNTI-Allocation-Indicator, ActivationInformation, Additional-EDCH-Setup-Info, Additional-EDCH-Cell-Information-Response-List, Additional-EDCH-FDD-Update-Information, Additional-EDCH-Cell-Information-To-Add-List, Additional-EDCH-Cell-Information-Response-RLReconf-List, DCH-MeasurementOccasion-Information, DCH-MeasurementType-Indicator, Setup-Or-ConfigurationChange-Or-Removal-Of-EDCH-On-secondary-UL-Frequency, Additional-EDCH-Cell-Information-Response-RLAddList, Non-Serving-RL-Preconfig-Setup, Non-Serving-RL-Preconfig-Info, CellCapabilityContainerExtension-TDD-LCR, Multi-Carrier-EDCH-Info, Multi-Carrier-EDCH-Reconfigure, Multi-Carrier-EDCH-Information-Response, MU-MIMO-InformationLCR, MU-MIMO-Indicator. Usefulness-Of-Battery-Optimization, MDT-Configuration, Neighbouring-UMTS-CellInformation-Ext, SourceID, TargetID, ClassmarkInformation2, ClassmarkInformation3, SpeechVersion, Cell-Capacity-Class-Value, LoadValue, Controlled-Object-Scope, CPC-RecoveryReport, UL-CLTD-Information, UL-CLTD-Information-Reconf, UL-CLTD-State-Update-Information, FTPICH-Information, FTPICH-Information-Reconf, FTPICH-Information-Response, FTPICH-Reconfiguration-Information

#### FROM RNSAP-IEs

PrivateIE-Container{},
ProtocolExtensionContainer{},
ProtocolIE-ContainerList{},
ProtocolIE-ContainerPair{},

ProtocolIE-ContainerPairList{}, ProtocolIE-Container{}, ProtocolIE-Single-Container{}, RNSAP-PRIVATE-IES, RNSAP-PROTOCOL-EXTENSION, RNSAP-PROTOCOL-IES, RNSAP-PROTOCOL-IES-PAIR FROM RNSAP-Containers maxCellsMeas, maxNoOfDSCHs, maxNoOfUSCHs, maxNrOfCCTrCHs, maxNoOfCommonRGCells, maxNrOfDCHs, maxNrOfTS, maxNrOfDPCHs, maxNrOfDPCHs768, maxNrOfDPCHsPerRL-1, maxNrOfDPCHs768PerRL-1, maxNrOfInterfaces, maxNrOfRLs, maxNrOfRLSets, maxNrOfRLSets-1, maxNrOfRLs-1, maxNrOfRLs-2, maxNrOfULTs, maxNrOfDLTs, maxResetContext, maxResetContextGroup, maxNoOfDSCHsLCR, maxNoOfUSCHsLCR, maxNrOfCCTrCHsLCR, maxNrOfTsLCR, maxNrOfDLTsLCR, maxNrOfULTsLCR, maxNrOfDPCHsLCR, maxNrOfDPCHsLCRPerRL-1, maxNrOfLCRTDDNeighboursPerRNC, maxNrOfMeasNCell, maxNrOfMACdFlows, maxNrOfMACdPDUSize, maxNrOfMCCHMessages, maxNrOfMBMSL3, maxNrOfEDCHMACdFlows, maxNrOfHSSICHs, maxNrOfHSSICHs-1, maxNrOfActiveMBMSServices, maxNrOfMBMSServices, maxNrofSigSeqERGHICH-1, maxNrOfCells, maxNrOfHSDSCH-1, maxNrOfEDCH-1, maxNrOfULCarriersLCR-1, maxNoOfGsmCell,

maxNrOfANRCells,

id-Active-MBMS-Bearer-ServiceFDD. id-Active-MBMS-Bearer-ServiceFDD-PFL. id-Active-MBMS-Bearer-ServiceTDD. id-Active-MBMS-Bearer-ServiceTDD-PFL, id-Active-Pattern-Sequence-Information, id-AdjustmentRatio, id-AllowedQueuingTime, id-AlternativeFormatReportingIndicator, id-AntennaColocationIndicator, id-BindingID, id-C-ID. id-C-RNTI. id-CFN, id-CFNReportingIndicator, id-CN-CS-DomainIdentifier, id-CN-PS-DomainIdentifier, id-Cause, id-CauseLevel-RL-AdditionFailureFDD, id-CauseLevel-RL-AdditionFailureTDD, id-CauseLevel-RL-ReconfFailure, id-CauseLevel-RL-SetupFailureFDD, id-CauseLevel-RL-SetupFailureTDD, id-CCTrCH-InformationItem-RL-FailureInd, id-CCTrCH-InformationItem-RL-RestoreInd, id-CellCapabilityContainer-FDD, id-CellCapabilityContainerExtension-FDD, id-CellCapabilityContainer-TDD, id-CellCapabilityContainer-TDD-LCR, id-CellPortionID, id-ChipOffset, id-ClosedLoopMode1-SupportIndicator, id-CNOriginatedPage-PagingRgst, id-CommonMeasurementAccuracy, id-CommonMeasurementObjectType-CM-Rprt, id-CommonMeasurementObjectType-CM-Rqst, id-CommonMeasurementObjectType-CM-Rsp, id-CommonMeasurementType, id-CommonTransportChannelResourcesInitialisationNotRequired, id-Common-EDCH-MAC-d-Flow-Specific-InformationFDD, id-Common-EDCH-Support-Indicator, id-CongestionCause, id-Continuous-Packet-Connectivity-DTX-DRX-Information, id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information, id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response, id-CPC-Information, id-CoverageIndicator, id-CriticalityDiagnostics, id-CellPortionLCRID, id-D-RNTI, id-D-RNTI-ReleaseIndication, id-DCHs-to-Add-FDD, id-DCHs-to-Add-TDD,

id-DCH-DeleteList-RL-ReconfPrepFDD, id-DCH-DeleteList-RL-ReconfPrepTDD. id-DCH-DeleteList-RL-ReconfRastFDD. id-DCH-DeleteList-RL-ReconfRostTDD. id-DCH-FDD-Information. id-DCH-TDD-Information, id-DCH-Indicator-For-E-DCH-HSDPA-Operation, id-FDD-DCHs-to-Modify, id-TDD-DCHs-to-Modify, id-DCH-InformationResponse, id-DCH-Rate-InformationItem-RL-CongestInd, id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD, id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD, id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD. id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD, id-DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD, id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD, id-DL-CCTrCH-InformationItem-RL-SetupRgstTDD, id-DL-CCTrCH-InformationListIE-PhyChReconfRgstTDD, id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD, id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD, id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD, id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD, id-DL-CCTrCH-InformationModifvList-RL-ReconfPrepTDD, id-DL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD, id-DL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD, id-DL-CCTrCH-InformationList-RL-SetupRgstTDD, id-FDD-DL-CodeInformation, id-DL-DPCH-Information-RL-ReconfPrepFDD, id-DL-DPCH-Information-RL-SetupRgstFDD, id-DL-DPCH-Information-RL-ReconfRgstFDD, id-DL-DPCH-InformationItem-PhyChReconfRqstTDD, id-DL-DPCH-InformationItem-RL-AdditionRspTDD, id-DL-DPCH-InformationItem-RL-SetupRspTDD, id-DL-DPCH-InformationAddListIE-RL-ReconfReadvTDD, id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadvTDD, id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD, id-DL-DPCH-TimingAdjustment, id-DL-DPCH-Power-Information-RL-ReconfPrepFDD, id-DL-Physical-Channel-Information-RL-SetupRgstTDD, id-DL-PowerBalancing-Information, id-DL-PowerBalancing-ActivationIndicator, id-DL-PowerBalancing-UpdatedIndicator, id-DL-ReferencePowerInformation, id-DLReferencePower, id-DLReferencePowerList-DL-PC-Rgst, id-DL-ReferencePowerInformation-DL-PC-Rost, id-DRXCycleLengthCoefficient, id-DedicatedMeasurementObjectType-DM-Fail, id-DedicatedMeasurementObjectType-DM-Fail-Ind, id-DedicatedMeasurementObjectType-DM-Rprt, id-DedicatedMeasurementObjectType-DM-Rgst, id-DedicatedMeasurementObjectType-DM-Rsp, id-DedicatedMeasurementType,

id-DelayedActivation, id-DelayedActivationList-RL-ActivationCmdFDD, id-DelavedActivationList-RL-ActivationCmdTDD. id-DelayedActivationInformation-RL-ActivationCmdFDD, id-DelayedActivationInformation-RL-ActivationCmdTDD, id-DPC-Mode, id-DPC-Mode-Change-SupportIndicator, id-DSCHs-to-Add-TDD, id-DSCH-DeleteList-RL-ReconfPrepTDD, id-DSCH-InformationListIE-RL-AdditionRspTDD, id-DSCH-InformationListIEs-RL-SetupRspTDD, id-DSCH-TDD-Information, id-DSCH-ModifyList-RL-ReconfPrepTDD, id-DSCH-RNTI. id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD, id-Dual-Band-Secondary-Serving-Cell-List, id-EDPCH-Information, id-EDCH-RL-Indication, id-EDCH-FDD-Information, id-Serving-EDCHRL-Id, id-EDCH-FDD-DL-ControlChannelInformation, id-EDCH-FDD-InformationResponse, id-E-DCH-FDD-Update-Information, id-EDCH-MACdFlows-To-Add, id-EDCH-FDD-Information-To-Modify, id-EDCH-MACdFlows-To-Delete, id-EDPCH-Information-RLReconfRequest-FDD, id-EDPCH-Information-RLAdditionReg-FDD, id-EDCH-MacdFlowSpecificInformationList-RL-PreemptRequiredInd, id-EDCH-MacdFlowSpecificInformationItem-RL-PreemptRequiredInd, id-EDCH-MacdFlowSpecificInformationList-RL-CongestInd, id-EDCH-MacdFlowSpecificInformationItem-RL-CongestInd, id-Enhanced-FACH-Support-Indicator, id-Enhanced-FACH-Information-ResponseFDD, id-Enhanced-PCH-Capability, id-ExtendedPropagationDelay, id-Extended-SRNC-ID, id-Extended-RNC-ID, id-Extended-S-RNTI, id-Extended-S-RNTI-Group, id-Serving-cell-change-CFN, id-E-DCH-Serving-cell-change-informationResponse, id-E-RNTI-For-FACH, id-H-RNTI-For-FACH, id-RNTI-Allocation-Indicator, id-Enhanced-PrimarvCPICH-EcNo, id-E-RNTI, id-F-DPCH-SlotFormat, id-F-DPCH-SlotFormatSupportRequest, id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD, id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD, id-Fast-Reconfiguration-Mode, id-Fast-Reconfiguration-Permission, id-FrameOffset,

id-F-DPCH-Information-RL-ReconfPrepFDD, id-F-DPCH-Information-RL-SetupRqstFDD, id-GA-Cell. id-GA-CellAdditionalShapes, id-GSM-Cell-InfEx-Rgst, id-HCS-Prio, id-HSDSCH-Configured-Indicator, id-HSDSCH-FDD-Information, id-HSDSCH-FDD-Information-Response, id-HSDSCH-FDD-Update-Information, id-HSDSCH-TDD-Update-Information, id-HSDSCH-Information-to-Modify, id-HSDSCH-Information-to-Modify-Unsynchronised, id-HSDSCH-MACdFlows-to-Add. id-HSDSCH-MACdFlows-to-Delete, id-HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd, id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd, id-HSDSCH-Physical-Layer-Category, id-HSDSCH-RNTI, id-HS-DSCH-serving-cell-change-information, id-HS-DSCH-serving-cell-change-informationResponse, id-HSDSCH-TDD-Information, id-HSDSCH-TDD-Information-Response, id-HSPDSCH-RL-ID, id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD, id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD, id-HSSICH-Info-DM-Rprt, id-HSSICH-Info-DM-Rgst, id-HSSICH-Info-DM, id-IMSI, id-InformationExchangeID, id-InformationExchangeObjectType-InfEx-Rprt, id-InformationExchangeObjectType-InfEx-Rgst, id-InformationExchangeObjectType-InfEx-Rsp, id-InformationReportCharacteristics, id-InformationType, id-Initial-DL-DPCH-TimingAdjustment, id-Initial-DL-DPCH-TimingAdjustment-Allowed, id-InnerLoopDLPCStatus, id-InterfacesToTraceItem, id-Inter-Frequency-Cell-List, id-L3-Information, id-AdjustmentPeriod, id-ListOfInterfacesToTrace, id-MaxAdjustmentStep, id-Max-UE-DTX-Cvcle, id-MBMS-Bearer-Service-List, id-MBMS-Bearer-Service-List-InfEx-Rsp, id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rqst, id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp, id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt, id-MBMS-Cell-InfEx-Rgst, id-MBMS-Cell-InfEx-Rsp, id-MBMS-Cell-InfEx-Rprt,

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id-MBSFN-Cluster-Identity, id-MBSFN-Scheduling-Transmission-Time-Interval-Info-List, id-MCCH-Configuration-Info. id-MCCH-Message-List, id-MeasurementFilterCoefficient. id-MeasurementID. id-MeasurementRecoveryBehavior, id-MeasurementRecovervReportingIndicator, id-MeasurementRecoverySupportIndicator, id-Multiple-PLMN-List, id-Multiple-RL-InformationResponse-RL-ReconfReadyTDD, id-NACC-Related-Data, id-Neighbouring-E-UTRA-CellInformation. id-Old-URA-ID. id-PagingArea-PagingRgst, id-PartialReportingIndicator, id-PDSCH-RL-ID, id-Permanent-NAS-UE-Identity, id-Phase-Reference-Update-Indicator, id-FACH-FlowControlInformation, id-PLCCH-Information-PhyChReconfRqstTDD, id-PowerAdjustmentType, id-PrimCCPCH-RSCP-DL-PC-RqstTDD, id-Primary-CPICH-Usage-For-Channel-Estimation, id-PropagationDelay, id-ProvidedInformation. id-RANAP-EnhancedRelocationInformationRequest, id-RANAP-EnhancedRelocationInformationResponse, id-RANAP-RelocationInformation, id-ResetIndicator, id-Released-CN-Domain, id-EDCH-RLSet-Id, id-RL-Information-PhyChReconfRqstFDD, id-RL-Information-PhyChReconfRqstTDD, id-RL-Information-RL-AdditionRostFDD, id-RL-Information-RL-AdditionRgstTDD, id-RL-Information-RL-DeletionRqst, id-RL-Information-RL-FailureInd, id-RL-Information-RL-ReconfPrepFDD, id-RL-Information-RL-ReconfPrepTDD, id-RL-Information-RL-RestoreInd, id-RL-Information-RL-SetupRgstFDD, id-RL-Information-RL-SetupRqstTDD, id-RL-InformationItem-RL-CongestInd, id-RL-InformationItem-DM-Rprt, id-RL-InformationItem-DM-Rost, id-RL-InformationItem-DM-Rsp. id-RL-InformationItem-RL-PreemptRequiredInd, id-RL-InformationItem-RL-SetupRqstFDD, id-RL-InformationList-RL-CongestInd, id-RL-InformationList-RL-AdditionRgstFDD, id-RL-InformationList-RL-DeletionRgst, id-RL-InformationList-RL-PreemptRequiredInd, id-RL-InformationList-RL-ReconfPrepFDD,

id-RL-InformationResponse-RL-AdditionRspTDD, id-RL-InformationResponse-RL-ReconfReadvTDD. id-RL-InformationResponse-RL-ReconfRspTDD. id-RL-InformationResponse-RL-SetupRspTDD, id-RL-InformationResponseItem-RL-AdditionRspFDD, id-RL-InformationResponseItem-RL-ReconfReadyFDD, id-RL-InformationResponseItem-RL-ReconfRspFDD, id-RL-InformationResponseItem-RL-SetupRspFDD, id-RL-InformationResponseList-RL-AdditionRspFDD, id-RL-InformationResponseList-RL-ReconfReadvFDD, id-RL-InformationResponseList-RL-ReconfRspFDD, id-RL-InformationResponseList-RL-SetupRspFDD, id-RL-ParameterUpdateIndicationFDD-RL-Information-Item, id-RL-ParameterUpdateIndicationFDD-RL-InformationList, id-RL-ReconfigurationFailure-RL-ReconfFail, id-RL-ReconfigurationReguestFDD-RL-InformationList, id-RL-ReconfigurationReguestFDD-RL-Information-IEs, id-RL-ReconfigurationRequestTDD-RL-Information, id-RL-ReconfigurationResponseTDD-RL-Information, id-RL-Specific-DCH-Info, id-RL-Specific-EDCH-Information, id-RL-Set-InformationItem-DM-Rprt, id-RL-Set-InformationItem-DM-Rgst, id-RL-Set-InformationItem-DM-Rsp, id-RL-Set-Information-RL-FailureInd, id-RL-Set-Information-RL-RestoreInd, id-RL-Set-Successful-InformationItem-DM-Fail, id-RL-Set-Unsuccessful-InformationItem-DM-Fail, id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind, id-RL-Successful-InformationItem-DM-Fail, id-RL-Unsuccessful-InformationItem-DM-Fail, id-RL-Unsuccessful-InformationItem-DM-Fail-Ind, id-ReportCharacteristics, id-Reporting-Object-RL-FailureInd, id-Reporting-Object-RL-RestoreInd, id-RNC-ID, id-RxTimingDeviationForTA, id-S-RNTI, id-SAI, id-Secondary-CPICH-Information, id-Secondary-CPICH-Information-Change, id-Secondary-Serving-Cell-List, id-Dual-Band-Secondary-Serving-Cell-List, id-SixtyfourQAM-DL-SupportIndicator, id-SFN, id-SFNReportingIndicator, id-SNA-Information, id-SRNC-ID,

id-SRNC-ID, id-STTD-SupportIndicator, id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD, id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD, id-TDD-maxNrDLPhysicalchannels, id-TDD-Support-8PSK, id-TDD-Support-PLCCH,

id-timeSlot-ISCP, id-TimeSlot-RL-SetupRspTDD. id-TnlOos. id-TraceDepth, id-TraceRecordingSessionReference, id-TraceReference, id-TransportBearerID, id-TransportBearerRequestIndicator, id-TransportLayerAddress, id-UC-ID, id-ContextInfoItem-Reset, id-ContextGroupInfoItem-Reset, id-Transmission-Gap-Pattern-Sequence-Information, id-UE-AggregateMaximumBitRate, id-UEIdentity, id-UEMeasurementType, id-UEMeasurementTimeslotInfoHCR, id-UEMeasurementTimeslotInfoLCR, id-UEMeasurementReportCharacteristics, id-UEMeasurementParameterModAllow, id-UEMeasurementValueInformation. id-UE-State, id-UE-with-enhanced-HS-SCCH-support-indicator, id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD, id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD, id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD, id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD, id-UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD, id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD, id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD, id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD, id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD, id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD, id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD, id-UL-CCTrCH-InformationList-RL-SetupRgstTDD, id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD, id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD, id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD, id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD, id-UL-DPCH-Information-RL-ReconfPrepFDD, id-UL-DPCH-Information-RL-ReconfRqstFDD, id-UL-DPCH-Information-RL-SetupRqstFDD, id-UL-DPDCHIndicatorEDCH, id-UL-DPCH-InformationItem-PhyChReconfRqstTDD, id-UL-DPCH-InformationItem-RL-AdditionRspTDD, id-UL-DPCH-InformationItem-RL-SetupRspTDD, id-UL-DPCH-InformationAddListIE-RL-ReconfReadvTDD, id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD, id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD, id-UL-Physical-Channel-Information-RL-SetupRgstTDD, id-UL-SIRTarget, id-URA-ID, id-URA-Information,

id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,

id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD, id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD, id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD. id-USCHs-to-Add. id-USCH-DeleteList-RL-ReconfPrepTDD. id-USCH-InformationListIE-RL-AdditionRspTDD, id-USCH-InformationListIEs-RL-SetupRspTDD, id-USCH-Information, id-USCH-ModifyList-RL-ReconfPrepTDD, id-USCHToBeAddedOrModifiedList-RL-ReconfReadvTDD, id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD, id-RL-LCR-InformationResponse-RL-SetupRspTDD, id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD, id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD, id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD, id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD, id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD, id-USCH-LCR-InformationListIEs-RL-SetupRspTDD, id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRgstTDD, id-RL-LCR-InformationResponse-RL-AdditionRspTDD, id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD, id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD, id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD, id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD, id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD, id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD, id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD, id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD, id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD, id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD, id-UL-Timeslot-LCR-InformationList-PhyChReconfRgstTDD, id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD, id-timeSlot-ISCP-LCR-List-DL-PC-Rast-TDD, id-TSTD-Support-Indicator-RL-SetupRqstTDD, id-PrimarvCCPCH-RSCP-RL-ReconfPrepTDD, id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD, id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD, id-neighbouringTDDCellMeasurementInformationLCR, id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD, id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD, id-TrafficClass, id-UL-Synchronisation-Parameters-LCR, id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD, id-TDD-UL-DPCH-TimeSlotFormatModifvItem-LCR-RL-ReconfReadvTDD, id-MAChs-ResetIndicator, id-UL-TimingAdvanceCtrl-LCR, id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD, id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD, id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD, id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD, id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD, id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD, id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD, id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD, id-DL-CCTrCH-InformationList-RL-ReconfRspTDD, id-DL-DPCH-InformationModifvItem-LCR-RL-ReconfRspTDD. id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRostTDD. id-UL-CCTrCH-InformationList-RL-AdditionRgstTDD, id-UL-CCTrCH-InformationItem-RL-AdditionRostTDD. id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD, id-DL-CCTrCH-InformationItem-RL-AdditionRgstTDD, id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD, id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD, id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD, id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD, id-PrimaryCCPCH-RSCP-Delta, id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp, id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp, id-SynchronisationIndicator, id-secondary-LCR-CCPCH-Info-TDD, id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp, id-CellCapabilityContainer-TDD768, id-neighbouringTDDCellMeasurementInformation768, id-RL-InformationResponse-RL-SetupRspTDD768, id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD768, id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD768, id-UL-DPCH-InformationItem-RL-SetupRspTDD768, id-DL-DPCH-InformationItem-RL-SetupRspTDD768, id-TDD768-minimumSpreadingFactor-UL, id-TDD768-minimumSpreadingFactor-DL, id-TDD768-maxNrDLPhysicalchannels, id-TDD768-maxNrDLPhysicalchannelsTS, id-RL-InformationResponse-RL-AdditionRspTDD768, id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD768, id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD768, id-UL-DPCH-InformationItem-RL-AdditionRspTDD768, id-DL-DPCH-InformationItem-RL-AdditionRspTDD768, id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768, id-UL-Timeslot-InformationModifvList-RL-ReconfReadvTDD768, id-DL-DPCH-InformationAddListIE-RL-ReconfReadvTDD768, id-DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768, id-secondary-CCPCH-Info-RL-ReconfReadyTDD768, id-HSPDSCH-Timeslot-InformationList-PhyChReconfRgstTDD768, id-UL-Timeslot-InformationList-PhyChReconfRgstTDD768, id-DL-Timeslot-InformationList-PhyChReconfRqstTDD768, id-multiple-DedicatedMeasurementValueList-TDD768-DM-Rsp, id-UEMeasurementTimeslotInfo768, id-DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD, id-DPCH-ID768-DM-Rsp, id-DPCH-ID768-DM-Rast, id-DPCH-ID768-DM-Rprt, id-RxTimingDeviationForTAext, id-RxTimingDeviationForTA768, id-E-DCH-Information, id-E-DCH-Information-Reconfig, id-E-DCH-Serving-RL-ID, id-E-DCH-Information-Response, id-E-DCH-768-Information,

id-Multi-Carrier-EDCH-Response,

id-E-DCH-768-Information-Reconfig, id-E-DCH-768-Information-Response. id-E-DCH-LCR-Information. id-E-DCH-LCR-Information-Reconfig, id-E-DCH-LCR-Information-Response, id-PowerControlGAP, id-IdleIntervalInformation, id-NeedforIdleInterval, id-IdleIntervalConfigurationIndicator, id-UARFCNforNt, id-HS-SICH-ID-Extension, id-HSSICH-Info-DM-Rgst-Extension, id-UPPCHPositionLCR, id-Common-EDCH-MAC-d-Flow-Specific-InformationLCR, id-Enhanced-FACH-Information-ResponseLCR, 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-RL-Reconf-Response, id-Additional-HS-Cell-Information-RL-Param-Upd. id-MinimumReducedE-DPDCH-GainFactor, id-ContinuousPacketConnectivity-DRX-InformationLCR, id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR, id-CPC-InformationLCR, id-E-DCH-Semi-PersistentScheduling-Information-LCR, id-HS-DSCH-Semi-PersistentScheduling-Information-LCR, id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR, id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR, id-ActivationInformation, id-Additional-EDCH-Cell-Information-RL-Setup-Reg, id-Additional-EDCH-Cell-Information-Response, id-Additional-EDCH-Cell-Information-RL-Add-Reg, id-Additional-EDCH-Cell-Information-Response-RLAdd, id-Additional-EDCH-Cell-Information-RL-Reconf-Prep, id-Additional-EDCH-Cell-Information-RL-Reconf-Req, id-Additional-EDCH-Cell-Information-RL-Param-Upd, id-Additional-EDCH-Cell-Information-ResponseRLReconf, id-DCH-MeasurementOccasion-Information, id-DCH-MeasurementType-Indicator, id-Non-Serving-RL-Preconfig-Info, id-Non-Serving-RL-Preconfig-Setup, id-Non-Serving-RL-Preconfig-Removal, id-CellCapabilityContainerExtension-TDD-LCR, id-Multi-Carrier-EDCH-Setup, id-Multi-Carrier-EDCH-Reconfigure,

id-MU-MIMO-InformationLCR, id-MU-MIMO-Indicator, id-Usefulness-Of-Battery-Optimization. id-MDT-Configuration, id-Neighbouring-UMTS-CellInformation-Ext, id-Extension-CommonMeasurementObjectType-CM-Rprt, id-Extension-CommonMeasurementObjectType-CM-Rqst, id-Extension-CommonMeasurementObjectTvpe-CM-Rsp, id-Extension-FailureIndicationMeasurementList, id-Extension-FailureMeasurementList, id-Extension-TerminationMeasurementList, id-GsmCellList-CM-Rprt, id-GsmCellList-CM-Rqst, id-GsmCellList-CM-Rsp, id-GSM-Cell-InfEx-Rgst, id-SpeechVersion, id-SourceID, id-TargetID, id-ClassmarkInformation2, id-ClassmarkInformation3, id-GSM-Cell-CM-Rqst, id-LoadValue, id-EventH, id-Cell-Capacity-Class-Value, id-Control-Type-InformationTransferControlReg, id-ANR-Cell-InfEx-Rgst, id-ANR-Cell-InfEx-Rsp, id-Trace-Collection-Entity-IP-Address, id-CPC-RecoveryReport, id-UL-CLTD-Information, id-UL-CLTD-Information-Reconf, id-UL-CLTD-State-Update-Information, id-FTPICH-Information, id-FTPICH-Information-Reconf, id-FTPICH-Information-Response, id-FTPICH-Reconfiguration-Information, id-Common-E-RGCH-Cell-InfEx-Rqst, id-Common-E-RGCH-Cell-InfEx-Rsp, id-Common-E-RGCH-Cell-InfEx-Rprt

RadioLinkSetupRequestFDD-IEs RNSAP-PROTOCOL-IES ::= { ID id-SRNC-ID CRITICALITY reject TYPE RNC-ID PRESENCE mandatory } ID id-S-RNTI CRITICALITY reject TYPE S-RNTI PRESENCE mandatory } | ID id-D-RNTI CRITICALITY reject TYPE D-RNTI PRESENCE optional ID id-AllowedQueuingTime CRITICALITY reject TYPE AllowedQueuingTime PRESENCE optional 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-Information-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 }, . . . UL-DPCH-Information-RL-SetupRgstFDD ::= SEQUENCE ul-ScramblingCode UL-ScramblingCode, minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength, maxNrOfUL-DPCHs OPTIONAL MaxNrOfUL-DPCHs -- This IE shall be present if minUL-ChannelisationCodeLength equals to 4 -- , ul-PunctureLimit PunctureLimit, 11] - TFCS TFCS, ul-DPCCH-SlotFormat UL-DPCCH-SlotFormat, ul-SIRTarget UL-SIR OPTIONAL, diversityMode DiversityMode, not-Used-sSDT-CellIdLength NULL OPTIONAL, not-Used-s-FieldLength NULL OPTIONAL, ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRgstFDD-ExtIEs } } OPTIONAL, iE-Extensions . . . UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= · CRITICALITY reject ID id-DPC-Mode EXTENSION DPC-Mode PRESENCE optional }| ID id-UL-DPDCHIndicatorEDCH CRITICALITY reject EXTENSION UL-DPDCHIndicatorEDCH PRESENCE optional }, . . . } DL-DPCH-Information-RL-SetupRgstFDD ::= SEQUENCE { tFCS TFCS, dl-DPCH-SlotFormat DL-DPCH-SlotFormat, nrOfDLchannelisationcodes NrOfDLchannelisationcodes, tFCI-SignallingMode TFCI-SignallingMode, tFCI-Presence TFCI-Presence OPTTONAL. -- This IE shall be present if DL DPCH Slot Format IE is equal to any of the values from 12 to 16 --. multiplexingPosition MultiplexingPosition, powerOffsetInformation PowerOffsetInformation-RL-SetupRgstFDD, FDD-TPC-DownlinkStepSize, fdd-dl-TPC-DownlinkStepSize limitedPowerIncrease LimitedPowerIncrease, innerLoopDLPCStatus InnerLoopDLPCStatus, iE-Extensions ProtocolExtensionContainer { {DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL, . . .

```
DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-SetupRgstFDD ::= SEQUENCE
                                        PowerOffset.
       pol-ForTFCI-Bits
       po2-ForTPC-Bits
                                        PowerOffset,
       po3-ForPilotBits
                                        PowerOffset,
       iE-Extensions
                                        ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
PowerOffsetInformation-RL-SetupRgstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-SetupRgstFDD
                                            ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocollE-Single-Container { {RL-InformationItemIEs-RL-
SetupRgstFDD } }
RL-InformationItemIEs-RL-SetupRqstFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-SetupRqstFDD CRITICALITY notify TYPE RL-InformationItem-RL-SetupRqstFDD
                                                                                                                         PRESENCE mandatory
RL-InformationItem-RL-SetupRgstFDD ::= SEOUENCE {
                                    RL-ID,
    rL-TD
    c-ID
                                    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-InformationList-RL-SetupRqstFDD --,
    dl-InitialTX-Power
                                    DL-Power
                                                        OPTIONAL,
    primaryCPICH-EcNo
                                    PrimaryCPICH-EcNo
                                                                OPTIONAL,
    not-Used-sSDT-CellID
                                    NULL
                                                    OPTIONAL,
    transmitDiversityIndicator
                                    TransmitDiversityIndicator
                                                                    OPTIONAL,
    -- This IE shall be present unless Diversity Mode IE in UL DPCH Information group is "none"
    iE-Extensions
                                    ProtocolExtensionContainer { {RL-InformationItem-RL-SetupRgstFDD-ExtIEs} } OPTIONAL,
    . . .
RL-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Enhanced-PrimaryCPICH-EcNo
                                                CRITICALITY ignore
                                                                         EXTENSION Enhanced-PrimaryCPICH-EcNo
                                                                                                                   PRESENCE optional }
      ID id-RL-Specific-DCH-Info
                                                CRITICALITY ignore
                                                                         EXTENSION RL-Specific-DCH-Info
                                                                                                                   PRESENCE optional
      ID id-DelavedActivation
                                                CRITICALITY reject
                                                                         EXTENSION DelavedActivation
                                                                                                                   PRESENCE optional
      ID id-CellPortionID
                                                CRITICALITY ignore
                                                                         EXTENSION CellPortionID
                                                                                                                   PRESENCE optional
                                                                                                                   PRESENCE optional
      ID id-RL-Specific-EDCH-Information
                                                CRITICALITY reject
                                                                         EXTENSION RL-Specific-EDCH-Information
      ID id-EDCH-RL-Indication
                                                                         EXTENSION EDCH-RL-Indication
                                                CRITICALITY reject
                                                                                                                   PRESENCE optional
      ID id-ExtendedPropagationDelay
                                                CRITICALITY iqnore
                                                                         EXTENSION ExtendedPropagationDelay
                                                                                                                   PRESENCE optional
      ID id-SynchronisationIndicator
                                                CRITICALITY reject
                                                                         EXTENSION SynchronisationIndicator
                                                                                                                   PRESENCE optional
                                                                                                                   PRESENCE optional
      ID id-HSDSCH-PreconfigurationSetup
                                                                         EXTENSION HSDSCH-PreconfigurationSetup
                                                CRITICALITY ignore
      ID id-Non-Serving-RL-Preconfig-Setup
                                                CRITICALITY ignore
                                                                         EXTENSION Non-Serving-RL-Preconfig-Setup
                                                                                                                   PRESENCE optional
     ID id-FTPICH-Information
                                                CRITICALITY ignore
                                                                         EXTENSION FTPICH-Information
                                                                                                                   PRESENCE optional },
```

}

RadioLinkSetupRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= ID id-Permanent-NAS-UE-Identity CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity PRESENCE optional } ID id-DL-PowerBalancing-Information CRITICALITY ignore EXTENSION DL-PowerBalancing-Information PRESENCE optional } ID id-HSDSCH-FDD-Information CRITICALITY reject EXTENSION HSDSCH-FDD-Information PRESENCE optional } TD id-HSPDSCH-RL-TD CRITICALITY reject EXTENSION RL-ID PRESENCE conditional} -- This IE shall be present if HS-DSCH Information IE is present. ID id-MBMS-Bearer-Service-List CRITICALITY notify EXTENSION MBMS-Bearer-Service-List PRESENCE optional } ID id-EDPCH-Information PRESENCE optional } CRITICALITY reject EXTENSION EDPCH-Information-FDD ID id-EDCH-FDD-Information CRITICALITY reject EXTENSION EDCH-FDD-Information PRESENCE conditional } -- This IE is present if E-DPCH Information IE is present. { ID id-Serving-EDCHRL-Id CRITICALITY reject EXTENSION EDCH-Serving-RL PRESENCE optional } | -- This IE is present if *E-DCHInformation* IE is present. ID id-F-DPCH-Information-RL-SetupRgstFDD CRITICALITY reject EXTENSION F-DPCH-Information-RL-SetupRqstFDD PRESENCE optional } ID id-Initial-DL-DPCH-TimingAdjustment-Allowed PRESENCE optional CRITICALITY ignore EXTENSION Initial-DL-DPCH-TimingAdjustment-Allowed 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-Continuous-Packet-Connectivity-DTX-DRX-Information CRITICALITY reject EXTENSION Continuous-Packet-Connectivity-DTX-DRX-Information PRESENCE optional } | { ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information CRITICALITY reject EXTENSION Continuous-Packet-Connectivity-HS-SCCH-Less-Information PRESENCE optional } | ID id-Extended-SRNC-ID CRITICALITY reject EXTENSION Extended-RNC-ID PRESENCE optional } | ID id-Additional-HS-Cell-Information-RL-Setup CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Setup-List PRESENCE optional}| ID id-UE-AggregateMaximumBitRate CRITICALITY ignore EXTENSION UE-AggregateMaximumBitRate PRESENCE optional } ID id-Additional-EDCH-Cell-Information-RL-Setup-Req CRITICALITY reject EXTENSION Additional-EDCH-Setup-Info PRESENCE optional } CRITICALITY ignore EXTENSION Usefulness-Of-Battery-Optimization ID id-Usefulness-Of-Battery-Optimization PRESENCE optional } ID id-UL-CLTD-Information CRITICALITY reject EXTENSION UL-CLTD-Information PRESENCE optional } ID id-Extended-S-RNTI CRITICALITY reject EXTENSION Extended-RNTI 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 ::=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-Setup-ItemIEs-ExtIEs } } OPTIONAL. iE-Extensions . . . Additional-HS-Cell-Information-RL-Setup-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . F-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE { powerOffsetInformation PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD,

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fdd-dl-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 RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-F-DPCH-SlotFormatSupportRequest
                                              CRITICALITY reject
                                                                         EXTENSION F-DPCH-SlotFormatSupportRequest
                                                                                                                          PRESENCE optional
    { ID id-F-DPCH-SlotFormat
                                          CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                            PRESENCE optional },
    . . .
PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD ::= SEQUENCE {
                                  PowerOffset,
   po2-ForTPC-Bits
    --This IE shall be ignored by DRNS
                                  ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-SetupRgstFDD-ExtIEs } }
   iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
    - -
-- RADIO LINK SETUP REQUEST TDD
  *******
RadioLinkSetupRequestTDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{RadioLinkSetupRequestTDD-IEs}},
                                  ProtocolExtensionContainer {{RadioLinkSetupReguestTDD-Extensions}}
   protocolExtensions
                                                                                                                    OPTIONAL.
    . . .
}
RadioLinkSetupRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-SRNC-ID
                                                         CRITICALITY reject TYPE RNC-ID
                                                                                                           PRESENCE mandatory
     ID id-S-RNTI
                                                                                                           PRESENCE mandatory }
                                                         CRITICALITY reject TYPE S-RNTI
     ID id-D-RNTI
                                                         CRITICALITY reject TYPE D-RNTI
                                                                                                           PRESENCE optional }
     ID id-UL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject TYPE UL-Physical-Channel-Information-RL-SetupRqstTDD
                                                                                                                                              PRESENCE mand
     ID id-DL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject TYPE DL-Physical-Channel-Information-RL-SetupRqstTDD
                                                                                                                                              PRESENCE mand
     ID id-AllowedOueuingTime
                                                         CRITICALITY reject TYPE AllowedOueuingTime
                                                                                                           PRESENCE optional }
     ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                         CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                                                                                           PRESENCE optional
}
     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
                                                                                                           PRESENCE optional
     ID id-DSCH-TDD-Information
                                                         CRITICALITY reject TYPE DSCH-TDD-Information
     ID id-USCH-Information
                                                         CRITICALITY reject TYPE USCH-Information
                                                                                                           PRESENCE optional
     ID id-RL-Information-RL-SetupRqstTDD
                                                         CRITICALITY reject TYPE RL-Information-RL-SetupRqstTDD
                                                                                                                            PRESENCE mandatory
},
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. . .
UL-Physical-Channel-Information-RL-SetupRqstTDD ::= SEQUENCE {
    maxNrTimeslots-UL
                                    MaxNrTimeslots.
    minimumSpreadingFactor-UL
                                    MinimumSpreadingFactor,
    maxNrULPhysicalchannels
                                    MaxNrULPhysicalchannels,
    iE-Extensions
                                    ProtocolExtensionContainer { { UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    . . .
UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-Support-8PSK
                                    CRITICALITY ignore
                                                             EXTENSION Support-8PSK
                                                                                         PRESENCE optional
                                                                                                                  }|
    -- Applicable to 1.28Mcps TDD only
     ID id-TDD768-minimumSpreadingFactor-UL
                                                     CRITICALITY ignore
                                                                                 EXTENSION MinimumSpreadingFactor768
                                                                                                                                 PRESENCE optional
    },
    . . .
DL-Physical-Channel-Information-RL-SetupRqstTDD ::= SEQUENCE {
    maxNrTimeslots-DL
                                    MaxNrTimeslots,
    minimumSpreadingFactor-DL
                                    MinimumSpreadingFactor,
                                    MaxNrDLPhysicalchannels,
    maxNrDLPhysicalchannels
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    . . .
DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-maxNrDLPhysicalchannels
                                                    CRITICALITY ignore
                                                                                 EXTENSION MaxNrDLPhysicalchannelsTS
                                                                                                                                         PRESENCE
optional
          }|
    { ID id-TDD-Support-8PSK
                                                     CRITICALITY ignore
                                                                                 EXTENSION Support-8PSK
    PRESENCE optional }|
    -- Applicable to 1.28Mcps TDD only
    { ID id-TDD-Support-PLCCH
                                                     CRITICALITY ignore
                                                                                 EXTENSION Support-PLCCH
    PRESENCE optional }|
    { ID id-TDD768-minimumSpreadingFactor-DL
                                                     CRITICALITY ignore
                                                                                 EXTENSION MinimumSpreadingFactor768
                                                                                                                                         PRESENCE
optional
          }|
      ID id-TDD768-maxNrDLPhysicalchannels
                                                     CRITICALITY ignore
                                                                                 EXTENSION MaxNrDLPhysicalchannels768
                                                                                                                                 PRESENCE optional
      ID id-TDD768-maxNrDLPhysicalchannelsTS
                                                     CRITICALITY ignore
                                                                                 EXTENSION MaxNrDLPhysicalchannelsTS768
                                                                                                                                 PRESENCE optional
                                                     ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { { UL-CCTrCH-
UL-CCTrCH-InformationList-RL-SetupRqstTDD
InformationItemIEs-RL-SetupRqstTDD } 
UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-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,
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ul-TFCS
                                    TFCS,
    tFCI-Coding
                                    TFCI-Coding,
    ul-PunctureLimit
                                    PunctureLimit.
    iE-Extensions
                                    ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRgstTDD-ExtIEs } } OPTIONAL,
    . . .
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UL-CCTrCH-InformationItem-RL-SetupRostTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { 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
    . . .
3
DL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                    ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocollE-Single-Container { {DL-CCTrCH-
InformationItemIEs-RL-SetupRqstTDD} }
DL-CCTrCH-InformationItemIEs-RL-SetupRgstTDD RNSAP-PROTOCOL-IES ::= {
     ID id-DL-CCTrCH-InformationItem-RL-SetupRgstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationItem-RL-SetupRgstTDD
                                                                                                                                  PRESENCE mandatory
}
DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                    CCTrCH-ID,
    dl-TFCS
                                    TFCS,
    tFCI-Coding
                                    TFCI-Coding,
                                    PunctureLimit,
    dl-PunctureLimit
    tdd-TPC-DownlinkStepSize
                                    TDD-TPC-DownlinkStepSize,
                                    CCTrCH-TPCList-RL-SetupRgstTDD OPTIONAL,
    cCTrCH-TPCList
                                    ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
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 } } OPTIONAL,
    iE-Extensions
    . . .
}
CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RL-Information-RL-SetupRqstTDD ::= SEQUENCE
    rL-ID
                                    RL-ID,
    c-ID
                                    C-ID,
    frameOffset
                                    FrameOffset,
                                    SpecialBurstScheduling,
    specialBurstScheduling
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PrimaryCCPCH-RSCP primaryCCPCH-RSCP OPTIONAL, dL-TimeSlot-ISCP DL-TimeSlot-ISCP-Info OPTIONAL. -- for 3.84Mcps TDD and 7.68Mcps TDD only iE-Extensions ProtocolExtensionContainer { {RL-Information-RL-SetupRgstTDD-ExtIEs} } OPTIONAL, . . . RL-Information-RL-SetupRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD CRITICALITY reject EXTENSION DL-TimeSlot-ISCP-LCR-Information PRESENCE optional }| { ID id-TSTD-Support-Indicator-RL-SetupRqstTDD CRITICALITY iqnore EXTENSION TSTD-Support-Indicator PRESENCE optional 31 --for 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 } EXTENSION UL-Synchronisation-Parameters-LCR ID id-UL-Synchronisation-Parameters-LCR CRITICALITY reject PRESENCE optional }| -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD ID id-PrimaryCCPCH-RSCP-Delta CRITICALITY ignore EXTENSION PrimaryCCPCH-RSCP-Delta PRESENCE optional }| ID id-IdleIntervalConfigurationIndicator CRITICALITY ignore EXTENSION NULL PRESENCE optional } { ID id-CellPortionLCRID CRITICALITY ignore EXTENSION CellPortionLCRID PRESENCE optional }, . . . } RadioLinkSetupRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { ID id-Permanent-NAS-UE-Identity CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity PRESENCE optional } ID id-HSDSCH-TDD-Information CRITICALITY reject EXTENSION HSDSCH-TDD-Information PRESENCE optional } ID id-HSPDSCH-RL-ID PRESENCE CRITICALITY reject EXTENSION RL-ID conditional } -- This IE shall be present if HS-DSCH Information IE is present. ID id-PDSCH-RL-ID CRITICALITY ignore PRESENCE optional } EXTENSION RL-ID ID id-MBMS-Bearer-Service-List CRITICALITY notify EXTENSION MBMS-Bearer-Service-List PRESENCE optional} PRESENCE optional ID id-E-DCH-Information CRITICALITY reject EXTENSION E-DCH-Information ID id-E-DCH-Serving-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE optional } ID id-E-DCH-768-Information CRITICALITY reject PRESENCE optional } EXTENSION E-DCH-768-Information ID id-E-DCH-LCR-Information CRITICALITY reject PRESENCE optional} EXTENSION E-DCH-LCR-Information ID id-Extended-SRNC-ID CRITICALITY reject EXTENSION Extended-RNC-ID PRESENCE optional } 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 } ID id-RNTI-Allocation-Indicator CRITICALITY ignore EXTENSION RNTI-Allocation-Indicator PRESENCE optional } ID id-DCH-MeasurementType-Indicator CRITICALITY reject EXTENSION DCH-MeasurementType-Indicator PRESENCE optional } ID id-Multi-Carrier-EDCH-Setup CRITICALITY reject EXTENSION Multi-Carrier-EDCH-Info PRESENCE optional } ID id-MU-MIMO-Indicator CRITICALITY reject EXTENSION MU-MIMO-Indicator PRESENCE optional} ID id-Extended-S-RNTI CRITICALITY reject EXTENSION Extended-RNTI PRESENCE optional },

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-- RADIO LINK SETUP RESPONSE FDD

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RadioLinkSetupResponseFDD ::= SEQUENCE { protocolIEs ProtocolIE-Container {{RadioLinkSetupResponseFDD-IEs}}, ProtocolExtensionContainer {{RadioLinkSetupResponseFDD-Extensions}} protocolExtensions OPTIONAL, . . . } RadioLinkSetupResponseFDD-IEs RNSAP-PROTOCOL-IES ::= { ID id-D-RNTI PRESENCE optional } CRITICALITY ignore TYPE D-RNTI PRESENCE optional ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier ID id-RL-InformationResponseList-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseList-RL-SetupRspFDD PRESENCE mandatory } | ID id-UL-SIRTarget CRITICALITY ignore TYPE UL-SIR PRESENCE optional }| ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }, . . . ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocollE-Single-Container { {RL-RL-InformationResponseList-RL-SetupRspFDD InformationResponseItemIEs-RL-SetupRspFDD} } RL-InformationResponseItemIEs-RL-SetupRspFDD RNSAP-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-ID, rL-Set-ID RL-Set-ID, uRA-Information URA-Information OPTIONAL, sAT SAI, qA-Cell GA-Cell OPTIONAL, qA-AccessPointPosition GA-AccessPointPosition OPTIONAL, received-total-wide-band-power Received-total-wide-band-power, not-Used-secondary-CCPCH-Info NULL OPTIONAL, dl-CodeInformation FDD-DL-CodeInformation, diversityIndication DiversityIndication-RL-SetupRspFDD, sSDT-SupportIndicator SSDT-SupportIndicator, maxUL-SIR UL-SIR, minUL-SIR UL-SIR, Closedlooptimingadjustmentmode closedlooptimingadjustmentmode OPTIONAL, maximumAllowedULTxPower MaximumAllowedULTxPower, maximumDLTxPower DL-Power, minimumDLTxPower DL-Power, OPTIONAL, primaryScramblingCode PrimaryScramblingCode uL-UARFCN UARFCN OPTIONAL, dL-UARFCN UARFCN OPTIONAL, primaryCPICH-Power PrimaryCPICH-Power, not-Used-dSCHInformationResponse NULL OPTIONAL, Neighbouring-UMTS-CellInformation neighbouring-UMTS-CellInformation OPTIONAL, neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation OPTIONAL, pC-Preamble PC-Preamble, SRB-Delay, sRB-Delay

iE-Extensions

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ProtocolExtensionContainer { {RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,

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RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-GA-CellAdditionalShapes CRITICALITY ignore EXTENSION GA-CellAdditionalShapes PRESENCE optional }| ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE optional } ID id-HCS-Prio CRITICALITY ignore EXTENSION HCS-Prio PRESENCE optional }| ID id-Primary-CPICH-Usage-For-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-For-Channel-Estimation PRESENCE optional }| PRESENCE optional } ID id-Secondary-CPICH-Information CRITICALITY iqnore EXTENSION Secondary-CPICH-Information ID id-Active-MBMS-Bearer-ServiceFDD-PFL CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListFDD-PFL PRESENCE optional } ID id-EDCH-RLSet-Id CRITICALITY ignore EXTENSION RL-Set-ID PRESENCE optional } ID id-EDCH-FDD-DL-ControlChannelInformation CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation PRESENCE optional ID id-Initial-DL-DPCH-TimingAdjustment CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment PRESENCE optional ID id-F-DPCH-SlotFormat CRITICALITY ignore EXTENSION F-DPCH-SlotFormat PRESENCE optional ID id-FrameOffset CRITICALITY ignore EXTENSION FrameOffset PRESENCE optional ID id-ChipOffset CRITICALITY ignore EXTENSION ChipOffset PRESENCE optional ID id-Neighbouring-E-UTRA-CellInformation CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation PRESENCE optional } CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo ID id-HSDSCH-PreconfigurationInfo PRESENCE optional } ID id-Non-Serving-RL-Preconfig-Info CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info PRESENCE optional } ID id-Neighbouring-UMTS-CellInformation-Ext CRITICALITY iqnore EXTENSION Neighbouring-UMTS-CellInformation-Ext PRESENCE optional } ID id-FTPICH-Information-Response CRITICALITY ignore EXTENSION FTPICH-Information-Response PRESENCE optional }, . . . DiversityIndication-RL-SetupRspFDD ::= CHOICE { combining Combining-RL-SetupRspFDD, nonCombiningOrFirstRL NonCombiningOrFirstRL-RL-SetupRspFDD } Combining-RL-SetupRspFDD ::= SEQUENCE { rL-TD RL-ID, ProtocolExtensionContainer { { CombiningItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL, iE-Extensions CombiningItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= ID id-DCH-InformationResponse CRITICALITY ignore EXTENSION DCH-InformationResponse PRESENCE optional ID id-EDCH-FDD-InformationResponse CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse PRESENCE optional }, NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEOUENCE { dCH-InformationResponse DCH-InformationResponse, iE-Extensions ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL. . . . NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { {ID id-EDCH-FDD-InformationResponse CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse PRESENCE optional } . . .

RadioLinkSetupResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { { ID id-HSDSCH-RNTI CRITICALITY ignore EXTENSION HSDSCH-RNTI PRESENCE optional }| ID id-HSDSCH-FDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response PRESENCE optional }| ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response CRITICALITY ignore EXTENSION Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response PRESENCE optional }| ID id-SixtyfourQAM-DL-SupportIndicator CRITICALITY ignore EXTENSION SixtyfourQAM-DL-SupportIndicator PRESENCE optional }| ID id-Additional-HS-Cell-Information-Response CRITICALITY ignore EXTENSION Additional-HS-Cell-Information-Response-List PRESENCE optional } { ID id-Additional-EDCH-Cell-Information-Response CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-List 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-TD RL-ID, hSDSCH-RNTI HSDSCH-RNTI, hS-DSCH-FDD-Secondary-Serving-Information-Response HS-DSCH-FDD-Secondary-Serving-Information-Response, SixtvfourOAM-DL-SupportIndicator OPTIONAL, sixtvfourOAM-DL-SupportIndicator ProtocolExtensionContainer { { Additional-HS-Cell-Information-Response-ItemIEs-ExtIEs } } OPTIONAL, iE-Extensions . . . Additional-HS-Cell-Information-Response-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { - --- RADIO LINK SETUP RESPONSE TDD \*\*\*\*\* RadioLinkSetupResponseTDD ::= SEQUENCE { protocolIEs ProtocolIE-Container {{RadioLinkSetupResponseTDD-IEs}}, ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}} protocolExtensions OPTIONAL, . . . RadioLinkSetupResponseTDD-IES RNSAP-PROTOCOL-IES ::= { TD id-D-RNTT CRITICALITY ignore TYPE D-RNTI PRESENCE optional ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional ID id-RL-InformationResponse-RL-SetupRspTDD CRITICALITY ignore TYPE RL-InformationResponse-RL-SetupRspTDD PRESENCE optional --Mandatory for 3.84Mcps TDD only PRESENCE mandatory } ID id-UL-SIRTarget CRITICALITY ignore TYPE UL-SIR ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }, . . .

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RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
    rL-ID
                                RL-ID.
    uRA-Information
                                URA-Information
                                                    OPTIONAL,
    sAI
                                SAI.
                                GA-Cell
                                            OPTIONAL,
    qA-Cell
                                GA-AccessPointPosition OPTIONAL,
    qA-AccessPointPosition
    ul-TimeSlot-ISCP-Info
                                UL-TimeSlot-ISCP-Info,
    maxUL-SIR
                                UL-SIR,
    minUL-SIR
                                UL-SIR,
    maximumAllowedULTxPower
                                MaximumAllowedULTxPower,
    maximumDLTxPower
                                DL-Power,
    minimumDLTxPower
                                DL-Power,
    uARFCNforNt.
                                UARFCN
                                                    OPTIONAL,
    cellParameterID
                                CellParameterID
                                                    OPTIONAL,
    syncCase
                                SyncCase
                                                    OPTIONAL,
    sCH-TimeSlot
                                SCH-TimeSlot
                                                    OPTIONAL,
    -- This IE shall be present if Sync Case IE is equal to "Case2". --
    sCTD-Indicator
                                SCTD-Indicator OPTIONAL,
    pCCPCH-Power
                                PCCPCH-Power,
    timingAdvanceApplied
                                TimingAdvanceApplied,
    alphaValue
                                AlphaValue,
    ul-PhysCH-SF-Variation
                                UL-PhysCH-SF-Variation,
    synchronisationConfiguration
                                        SynchronisationConfiguration,
    secondary-CCPCH-Info-TDD
                                        Secondary-CCPCH-Info-TDD
                                                                     OPTIONAL,
    ul-CCTrCHInformation
                                        UL-CCTrCHInformationList-RL-SetupRspTDD
                                                                                     OPTIONAL,
    dl-CCTrCHInformation
                                        DL-CCTrCHInformationList-RL-SetupRspTDD
                                                                                     OPTIONAL,
    dCH-InformationResponse
                                        DCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
    dsch-InformationResponse
                                        DSCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
    usch-InformationResponse
                                        USCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
    neighbouring-UMTS-CellInformation
                                                Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation
                                                Neighbouring-GSM-CellInformation OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {RL-InformationResponse-RL-SetupRspTDD-ExtIEs } } OPTIONAL,
    . . .
RL-InformationResponse-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-GA-CellAdditionalShapes
                                                     CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                                 PRESENCE optional }|
      ID id-HCS-Prio
                                                                                                                          PRESENCE optional }|
                                                     CRITICALITY ignore EXTENSION HCS-Prio
    { ID id-TimeSlot-RL-SetupRspTDD
                                                     CRITICALITY ignore EXTENSION TimeSlot
                                                                                                                          PRESENCE conditional }
    -- This IE shall be present if Sync Case IE is Case1. --
      ID id-Neighbouring-E-UTRA-CellInformation
                                                     CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                 PRESENCE optional }
    { ID id-Neighbouring-UMTS-CellInformation-Ext
                                                    CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                 PRESENCE optional },
    . . .
UL-CCTrCHInformationList-RL-SetupRspTDD ::= Protocolle-Single-Container {{UL-CCTrCHInformationListIEs-RL-SetupRspTDD}}
UL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD CRITICALITY ignore TYPE UL-CCTrCHInformationListIE-RL-SetupRspTDD
                                                                                                                                         PRESENCE
mandatory }
}
UL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-SetupRspTDD
```

```
UL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
    cCTrCH-ID
                               CCTrCH-ID.
    ul-DPCH-Information
                                    UL-DPCH-InformationList-RL-SetupRspTDD
                                                                                OPTIONAL.
    iE-Extensions
                                    ProtocolExtensionContainer { { UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs } } OPTIONAL,
    . . .
UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD
                                                                    CRITICALITY ignore
                                                                                             EXTENSION UL-SIR
                                                                                                                         PRESENCE optional },
    . . .
}
UL-DPCH-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-SetupRspTDD }
UL-DPCH-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationItem-RL-SetupRspTDD
                                                       CRITICALITY ignore TYPE UL-DPCH-InformationItem-RL-SetupRspTDD PRESENCE mandatory
UL-DPCH-InformationItem-RL-SetupRspTDD ::= SEQUENCE
                                    RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    uL-Timeslot-Information
                                    UL-Timeslot-Information,
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs } } OPTIONAL,
    . . .
UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-SetupRspTDD}}
DL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD CRITICALITY ignore TYPE DL-CCTrCHInformationListIE-RL-SetupRspTDD PRESENCE mandatory }
DL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-SetupRspTDD
DL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
    cCTrCH-ID
                                    CCTrCH-ID,
    dl-DPCH-Information
                                    DL-DPCH-InformationList-RL-SetupRspTDD
                                                                                OPTIONAL,
                                    ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional } -- this is a DCH type CCTrCH power
     ID id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional }, -- this is a DCH type CCTrCH power
    . . .
```

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```

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DL-DPCH-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-SetupRspTDD } }
DL-DPCH-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-RL-SetupRspTDD
                                                        CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-SetupRspTDD PRESENCE mandatory
DL-DPCH-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    repetitionPeriod
                                   RepetitionPeriod,
    repetitionLength
                                   RepetitionLength,
                                   TDD-DPCHOffset,
    tDD-DPCHOffset
    dL-Timeslot-Information
                                   DL-Timeslot-Information,
                                   ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocollE-Single-Container {{DCH-InformationResponseListIEs-RL-SetupRspTDD}}
DCH-InformationResponseListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory }
DSCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DSCH-InformationList-RL-SetupRspTDD}}
DSCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationListIEs-RL-SetupRspTDD
                                                       CRITICALITY ignore TYPE DSCH-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory }
DSCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCHInformationItem-RL-SetupRspTDD
DSCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
    dsch-ID
                           DSCH-ID,
    dSCH-FlowControlInformation
                                   DSCH-FlowControlInformation,
    bindingID
                           BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    transportFormatManagement TransportFormatManagement,
    iE-Extensions
                            ProtocolExtensionContainer { {DSCHInformationItem-RL-SetupRspTDD-ExtIEs } } OPTIONAL,
    . . .
DSCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
USCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{USCH-InformationList-RL-SetupRspTDD}}
USCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    ID id-USCH-InformationListIEs-RL-SetupRspTDD
                                                       CRITICALITY ignore TYPE USCH-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory }
USCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCHInformationItem-RL-SetupRspTDD
```

USCHInformationItem-RL-SetupRspT usch-ID	<pre>FDD ::= SEQUENCE {   USCH-ID,</pre>			
	BindingID OPTIONAL,			
5	TransportLayerAddress	OPTIONAL,		
	TransportFormatManageme			
iE-Extensions			.onItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,	
}				
USCHInformationItem-RL-SetupRsp1	DD-ExtIEs RNSAP-PROTOCC	DL-EXTENSION ::= {		
}				
		(		
RadioLinkSetupResponseTDD-Extens		L. L		
{ ID id-RL-LCR-InformationRe		CRITICALITY ignore	EXTENSION RL-LCR-InformationResponse-RL-SetupRspTD	PRESENCE optional}
Mandatory for 1.28Mcps TDD	) OILY	CDITICALITY CONCERNMENT	EVERNOION HODOOH DNEI	DRECENCE ontional)
{ ID id-HSDSCH-RNTI { ID id-HSDSCH-TDD-Informati	on Bognongo	CRITICALITY ignore CRITICALITY ignore		PRESENCE optional}  PRESENCE optional}
{ ID Id-HSDSCH-IDD-INFORMACI { ID id-DSCH-RNTI	.ou-kespouse	5	EXTENSION HSDSCH-IDD-INIOFMACION-Response EXTENSION DSCH-RNTI	PRESENCE optional}
{ ID Id-DSCH-RNII { ID id-Active-MBMS-Bearer-S	Servi ceTDD_DEI		EXTENSION DSCH-RNII EXTENSION Active-MBMS-Bearer-Service-ListTDD-PFL	PRESENCE optional}
{ ID id-RL-InformationRespon			EXTENSION ACCIVE-MEMS-Bearer-Service-ListibD-PFL EXTENSION RL-InformationResponse-RL-SetupRspTDD768	
{ ID id-E-DCH-Information-Re			EXTENSION E-DCH-Information-Response	PRESENCE optional}
{ ID id-E-DCH-768-Informatic	-		EXTENSION E-DCH-768-Information-Response	PRESENCE optional}
{ ID id-E-DCH-LCR-Informatic	-	5	EXTENSION E-DCH-LCR-Information-Response	PRESENCE optional}
{ ID id-ContinuousPacketConn			TICALITY ignore EXTENSION ContinuousPacketConnectiv	
ResponseLCR PRESENCE optiona	<b>_</b>			
{ ID id-HS-DSCH-Semi-Persist	21	on-ResponseLCR CRI	TICALITY ignore EXTENSION HS-DSCH-Semi-Persistents	cheduling-
	SENCE optional}	1	5	5
{ ID id-E-DCH-Semi-Persisten	itScheduling-Informatior	1-ResponseLCR CRI	TICALITY ignore EXTENSION E-DCH-Semi-PersistentSche	eduling-Information-
ResponseLCR PRESENCE optiona	al }			
{ ID id-E-RNTI-For-FACH		CRITICALITY ignore	EXTENSION E-RNTI	PRESENCE optional}
{ ID id-H-RNTI-For-FACH		CRITICALITY ignore		PRESENCE optional}
{ ID id-DCH-MeasurementOccas			EXTENSION DCH-MeasurementOccasion-Information	PRESENCE optional}
<pre>{ ID id-Multi-Carrier-EDCH-Response</pre>			EXTENSION Multi-Carrier-EDCH-Information-Response	PRESENCE optional}
{ ID id-MU-MIMO-InformationL	JCR	CRITICALITY reject	EXTENSION MU-MIMO-InformationLCR	PRESENCE optional},
}				
RL-LCR-InformationResponse-RL-Se	ATUNRENTED SECTIENCE	\$		
-	RL-ID,	l		
	URA-Information,			
	SAI,			
	GA-Cell OPTIONAL,			
	GA-AccessPointPosition	OPTIONAL.		
5	UL-TimeSlot-ISCP-LCR-In	•		
	UL-SIR,			
	UL-SIR,			
maximumAllowedULTxPower	MaximumAllowedULTxPower	- <i>I</i>		
	DL-Power,			
maximumDLTxPower	<b>DT D</b>			
	DL-Power,			
minimumDLTxPower	UARFCN	OPTIONAL,		
minimumDLTxPower uARFCNforNt		OPTIONAL, OPTIONAL,		

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pCCPCH-Power
                                PCCPCH-Power,
    alphaValue
                                AlphaValue,
    ul-PhysCH-SF-Variation
                                UL-PhysCH-SF-Variation,
    synchronisationConfiguration
                                            SynchronisationConfiguration,
    secondary-LCR-CCPCH-Info-TDD
                                            Secondary-LCR-CCPCH-Info-TDD
                                                                                             OPTIONAL.
    ul-LCR-CCTrCHInformation
                                            UL-LCR-CCTrCHInformationList-RL-SetupRspTDD
                                                                                             OPTIONAL,
    dl-LCR-CCTrCHInformation
                                            DL-LCR-CCTrCHInformationList-RL-SetupRspTDD
                                                                                             OPTIONAL,
    dCH-InformationResponse
                                            DCH-InformationResponseList-RL-SetupRspTDD
                                                                                             OPTIONAL,
    dsch-LCR-InformationResponse
                                            DSCH-LCR-InformationResponse-RL-SetupRspTDD
                                                                                             OPTIONAL,
                                            USCH-LCR-InformationResponse-RL-SetupRspTDD
    usch-LCR-InformationResponse
                                                                                             OPTIONAL,
    neighbouring-UMTS-CellInformation
                                            Neighbouring-UMTS-CellInformation
                                                                                             OPTIONAL,
    neighbouring-GSM-CellInformation
                                            Neighbouring-GSM-CellInformation
                                                                                             OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { RL-LCR-InformationResponseList-RL-SetupRspTDD-ExtIEs } }
    OPTIONAL.
    . . .
RL-LCR-InformationResponseList-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-GA-CellAdditionalShapes
                                                    CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                                 PRESENCE optional }
      ID id-HCS-Prio
                                                                                                                                 PRESENCE optional
                                                    CRITICALITY ignore EXTENSION HCS-Prio
     ID id-UL-TimingAdvanceCtrl-LCR
                                                    CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR
                                                                                                                                 PRESENCE optional }
    --Mandatory for 1.28Mcps TDD only
    { ID id-PowerControlGAP
                                                    CRITICALITY ignore EXTENSION ControlGAP
                                                                                                                                 PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    { ID id-SixtyfourQAM-DL-SupportIndicator
                                                    CRITICALITY ignore EXTENSION SixtyfourQAM-DL-SupportIndicator
                                                                                                                                 PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
     ID id-Neighbouring-E-UTRA-CellInformation
                                                    CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                 PRESENCE optional }
      ID id-IdleIntervalInformation
                                                    CRITICALITY ignore EXTENSION IdleIntervalInformation
                                                                                                                                 PRESENCE optional }
    { ID id-Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                 PRESENCE optional },
                                                    CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
    . . .
UL-LCR-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocollE-Single-Container {{UL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD}}
UL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD CRITICALITY iqnore TYPE UL-LCR-CCTrCHInformationListIE-RL-SetupRspTDD
    PRESENCE mandatory }
}
UL-LCR-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD
UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
    ul-DPCH-LCR-Information
                                UL-DPCH-LCR-InformationList-RL-SetupRspTDD
                                                                                 OPTIONAL,
                                ProtocolExtensionContainer { { UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs } } OPTIONAL.
    iE-Extensions
    . . .
UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD
                                                                         CRITICALITY ignore
                                                                                                 EXTENSION UL-SIR
                                                                                                                         PRESENCE optional },
    . . .
}
UL-DPCH-LCR-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD } }
```

```
UL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
     ID id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD
                                                            CRITICALITY ignore TYPE UL-DPCH-LCR-InformationItem-RL-SetupRspTDD PRESENCE mandatory
}
UL-DPCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
                                    TDD-DPCHOffset,
    tDD-DPCHOffset
    uL-TimeslotLCR-Information
                                    UL-TimeslotLCR-Information,
                                    ProtocolExtensionContainer { {UL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-LCR-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocollE-Single-Container {{DL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD}}
DL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD CRITICALITY ignore TYPE DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD PRESENCE
mandatory }
}
DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD
DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE
    cCTrCH-ID
                                CCTrCH-ID,
    dl-DPCH-LCR-Information
                                DL-DPCH-LCR-InformationList-RL-SetupRspTDD
                                                                                OPTIONAL,
                                ProtocolExtensionContainer { {DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-DPCH-LCR-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD } }
DL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
      ID id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD
                                                            CRITICALITY ignore TYPE DL-DPCH-LCR-InformationItem-RL-SetupRspTDD PRESENCE mandatory
}
DL-DPCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    dL-Timeslot-LCR-Information
                                    DL-TimeslotLCR-Information,
    tSTD-Indicator
                                    TSTD-Indicator,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs } } OPTIONAL,
    . . .
```

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DL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DSCH-LCR-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DSCH-LCR-InformationList-RL-SetupRspTDD}}
DSCH-LCR-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD
                                                            CRITICALITY ignore TYPE DSCH-LCR-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory
DSCH-LCR-InformationListIEs-RL-SetupRspTDD ::= SEOUENCE (SIZE(0..maxNoOfDSCHsLCR)) OF DSCH-LCR-InformationItem-RL-SetupRspTDD
DSCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    dsch-ID
                                        DSCH-ID,
    dSCH-FlowControlInformation
                                        DSCH-FlowControlInformation,
    bindingID
                                        BindingID OPTIONAL,
    transportLayerAddress
                                        TransportLayerAddress
                                                                OPTIONAL,
    transportFormatManagement
                                        TransportFormatManagement,
    iE-Extensions
                                        ProtocolExtensionContainer { {DSCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    . . .
DSCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
USCH-LCR-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{USCH-LCR-InformationList-RL-SetupRspTDD}}
USCH-LCR-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCH-LCR-InformationListIEs-RL-SetupRspTDD
                                                            CRITICALITY ignore TYPE USCH-LCR-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory
USCH-LCR-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHsLCR)) OF USCH-LCR-InformationItem-RL-SetupRspTDD
USCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    usch-ID
                                USCH-ID,
    bindingID
                                BindingID OPTIONAL,
    transportLayerAddress
                                TransportLayerAddress
                                                        OPTIONAL,
    transportFormatManagement
                                TransportFormatManagement,
                                ProtocolExtensionContainer { {USCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
USCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-InformationResponse-RL-SetupRspTDD768 ::= SEQUENCE {
    rL-ID
                                RL-ID,
    uRA-Information
                                URA-Information
                                                    OPTIONAL,
    sAI
                                SAI,
```

}

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qA-Cell
                                GA-Cell
                                            OPTIONAL,
    qA-AccessPointPosition
                                GA-AccessPointPosition
                                                       OPTIONAL.
    ul-TimeSlot-ISCP-Info
                                UL-TimeSlot-ISCP-Info.
    maxUL-SIR
                                UL-SIR.
    minUL-SIR
                                UL-SIR.
    maximumAllowedULTxPower
                                MaximumAllowedULTxPower,
    maximumDLTxPower
                                DL-Power,
    minimumDLTxPower
                                DL-Power,
    uARFCNforNt
                                UARFCN
                                                    OPTIONAL,
    cellParameterID
                                CellParameterID
                                                    OPTIONAL,
    syncCase
                                SyncCase
                                                    OPTIONAL,
                                SCH-TimeSlot
                                                    OPTIONAL,
    sCH-TimeSlot
    -- This IE shall be present if Sync Case IE is equal to "Case2". --
    sCTD-Indicator
                                SCTD-Indicator OPTIONAL,
    pCCPCH-Power
                                PCCPCH-Power,
    timingAdvanceApplied
                                TimingAdvanceApplied,
    alphaValue
                                AlphaValue,
    ul-PhysCH-SF-Variation
                                UL-PhysCH-SF-Variation,
    synchronisationConfiguration
                                        SynchronisationConfiguration,
                                        Secondary-CCPCH-Info-TDD768
    secondary-CCPCH-Info-TDD768
                                                                         OPTIONAL,
    ul-CCTrCHInformation768
                                        UL-CCTrCHInformationList-RL-SetupRspTDD768
                                                                                         OPTIONAL,
    dl-CCTrCHInformation768
                                        DL-CCTrCHInformationList-RL-SetupRspTDD768
                                                                                         OPTIONAL,
                                        DCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
    dCH-InformationResponse
    dsch-InformationResponse
                                        DSCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
    usch-InformationResponse
                                        USCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
    neighbouring-UMTS-CellInformation
                                                Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation
                                                Neighbouring-GSM-CellInformation OPTIONAL,
    qA-CellAdditionalShapes
                                                GA-CellAdditionalShapes
                                                                             OPTIONAL,
    hCS-Prio
                                        HCS-Prio
                                                        OPTIONAL,
    timeSlot-RL-SetupRspTDD
                                        TimeSlot
                                                    OPTIONAL,
    -- This IE shall be present if Sync Case IE is Case1. --
    iE-Extensions
                                    ProtocolExtensionContainer { {RL-InformationResponse-RL-SetupRspTDD768-ExtIEs} } OPTIONAL,
    . . .
RL-InformationResponse-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Neighbouring-E-UTRA-CellInformation
                                                         CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                 PRESENCE optional }
     ID id-Neighbouring-UMTS-CellInformation-Ext
                                                         CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                 PRESENCE optional },
    . . .
UL-CCTrCHInformationList-RL-SetupRspTDD768 ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-SetupRspTDD768}}
UL-CCTrCHInformationListIEs-RL-SetupRspTDD768 RNSAP-PROTOCOL-IES ::= {
    ID id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD768 CRITICALITY ignore TYPE UL-CCTrCHInformationListIE-RL-SetupRspTDD768
    PRESENCE mandatory }
}
UL-CCTrCHInformationListIE-RL-SetupRspTDD768 ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-SetupRspTDD768
UL-CCTrCHInformationItem-RL-SetupRspTDD768 ::= SEQUENCE
    cCTrCH-ID
                                CCTrCH-ID,
    ul-DPCH-Information768
                                        UL-DPCH-InformationList-RL-SetupRspTDD768
                                                                                         OPTIONAL,
```

```
uL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD768
                                                                             OPTIONAL,
                                                                UL-SIR
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs } } OPTIONAL,
    . . .
UL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationList-RL-SetupRspTDD768 ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-SetupRspTDD768 } }
UL-DPCH-InformationListIEs-RL-SetupRspTDD768 RNSAP-PROTOCOL-IES ::= {
      ID id-UL-DPCH-InformationItem-RL-SetupRspTDD768
                                                            CRITICALITY ignore TYPE UL-DPCH-InformationItem-RL-SetupRspTDD768 PRESENCE mandatory
}
UL-DPCH-InformationItem-RL-SetupRspTDD768 ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    uL-Timeslot-Information768
                                        UL-Timeslot-Information768,
                                    ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-CCTrCHInformationList-RL-SetupRspTDD768 ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-SetupRspTDD768}}
DL-CCTrCHInformationListIEs-RL-SetupRspTDD768 RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD768 CRITICALITY ignore TYPE DL-CCTrCHInformationListIE-RL-SetupRspTDD768 PRESENCE
mandatory }
DL-CCTrCHInformationListIE-RL-SetupRspTDD768 ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-SetupRspTDD768
DL-CCTrCHInformationItem-RL-SetupRspTDD768 ::= SEQUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
    dl-DPCH-Information768
                                        DL-DPCH-InformationList-RL-SetupRspTDD768
                                                                                         OPTIONAL,
    cCTrCH-Maximum-DL-Power
                                        DL-Power
                                                        OPTIONAL, -- this is a DCH type CCTrCH power
                                                        OPTIONAL, -- this is a DCH type CCTrCH power
    cCTrCH-Minimum-DL-Power
                                        DL-Power
                                    ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
DL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-DPCH-InformationList-RL-SetupRspTDD768 ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-SetupRspTDD768 } }
DL-DPCH-InformationListIEs-RL-SetupRspTDD768 RNSAP-PROTOCOL-IES ::= {
```

```
ID id-DL-DPCH-InformationItem-RL-SetupRspTDD768
                                                         CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-SetupRspTDD768 PRESENCE mandatory
}
DL-DPCH-InformationItem-RL-SetupRspTDD768 ::= SEQUENCE {
   repetitionPeriod
                                  RepetitionPeriod,
   repetitionLength
                                  RepetitionLength,
                                  TDD-DPCHOffset,
   tDD-DPCHOffset
    dL-Timeslot-Information768
                                  DL-Timeslot-Information768,
                                  ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
DL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
      *******
- -
-- RADIO LINK SETUP FAILURE FDD
- -
  ******
RadioLinkSetupFailureFDD ::= SEOUENCE {
                                                             {{RadioLinkSetupFailureFDD-IEs}},
   protocolIEs
                                  ProtocolIE-Container
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}
                                                                                                                    OPTIONAL.
    . . .
3
RadioLinkSetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI
                                          CRITICALITY ignore TYPE D-RNTI
                                                                                                 PRESENCE optional
     ID id-CN-PS-DomainIdentifier
                                          CRITICALITY ignore TYPE CN-PS-DomainIdentifier
                                                                                                 PRESENCE optional
     ID id-CN-CS-DomainIdentifier
                                          CRITICALITY ignore TYPE CN-CS-DomainIdentifier
                                                                                                 PRESENCE optional
     ID id-CauseLevel-RL-SetupFailureFDD
                                          CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureFDD
                                                                                                 PRESENCE mandatory }
     ID id-UL-SIRTarget
                                          CRITICALITY ignore TYPE UL-SIR
                                                                                                 PRESENCE optional
    ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                 PRESENCE optional
                                                                                                                   }.
    . . .
CauseLevel-RL-SetupFailureFDD ::= CHOICE
                       GeneralCauseList-RL-SetupFailureFDD,
   generalCause
                       RLSpecificCauseList-RL-SetupFailureFDD,
   rLSpecificCause
    . . .
}
GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE
   cause
                                              Cause,
                                              ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs } }
   iE-Extensions
                                                                                                                                 OPTIONAL.
GeneralCauseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-SetupFailureFDD
                                                                UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD
                                                                SuccessfulRL-InformationResponseList-RL-SetupFailureFDD OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs } }
                                                                                                                                        OPTIONAL.
    . . .
RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-RNTI
                                                CRITICALITY ignore
                                                                         EXTENSION HSDSCH-RNTI
    PRESENCE optional }|
     ID id-HSDSCH-FDD-Information-Response
                                                CRITICALITY ignore
                                                                         EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                                 PRESENCE optional }
     ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                                     CRITICALITY ignore
                                                                                                                  EXTENSION Continuous-Packet-
Connectivity-HS-SCCH-Less-Information-Response
                                                    PRESENCE optional }|
      ID id-SixtyfourOAM-DL-SupportIndicator
                                                CRITICALITY ignore
                                                                         EXTENSION SixtyfourOAM-DL-SupportIndicator
                                                                                                                                 PRESENCE optional }|
      ID id-Additional-HS-Cell-Information-Response CRITICALITY ignore
                                                                             EXTENSION Additional-HS-Cell-Information-Response-List
    PRESENCE optional }|
    { ID id-Additional-EDCH-Cell-Information-Response
                                                            CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-List
        PRESENCE optional },
    . . .
UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { { UnsuccessfulRL-
InformationResponse-RL-SetupFailureFDD-IEs} }
UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD
                                                                         CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponse-RL-
SetupFailureFDD
                    PRESENCE mandatory }
}
UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID
                                RL-ID,
    cause
                                Cause,
                                    ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Max-UE-DTX-Cycle
                                   CRITICALITY ignore
                                                            EXTENSION Max-UE-DTX-Cycle
                                                                                                  PRESENCE conditional },
    -- This IE shall be present if the Cause IE is set to "Continuous Packet Connectivity UE DTX Cycle not Available".
    . . .
SuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-1)) OF ProtocollE-Single-Container { {SuccessfulRL-
InformationResponse-RL-SetupFailureFDD-IEs}
SuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD
                                                                    CRITICALITY iqnore TYPE SuccessfulRL-InformationResponse-RL-SetupFailureFDD
        PRESENCE mandatory }
}
SuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE
    rL-ID
                                            RL-ID,
    rL-Set-ID
                                            RL-Set-ID,
```

uRA-Information	URA-Inform	ation	OPTIONAL,		
sAI	SAI,				
qA-Cell	GA-Cell	OPTIONAL,			
qA-AccessPointPosition		ointPosition	OPTIONAL,		
received-total-wide-band-power		otal-wide-band-power,			
not-Used-secondary-CCPCH-Info	NU		CIONAL,		
dl-CodeInformation		eInformation,			
diversityIndication		ndication-RL-SetupFai	lureFDD,		
sSDT-SupportIndicator		rtIndicator,	· · · /		
maxUL-SIR	UL-SIR,	· · · · · · · · ·			
minUL-SIR	UL-SIR,				
closedlooptimingadjustmentmode	Closedloop	timingadjustmentmode	OPTIONAL,		
maximumAllowedULTxPower	-	owedULTxPower,			
maximumDLTxPower	DL-Power,				
minimumDLTxPower	DL-Power,				
primaryCPICH-Power	PrimaryCPI	CH-Power,			
primaryScramblingCode	PrimaryScr	amblingCode	OPTIONAL,		
uL-UARFCN	UARFCN		OPTIONAL,		
dL-UARFCN	UARFCN		OPTIONAL,		
not-Used-dSCH-InformationResponse-RL-Se	etupFailureF	DD NULL	OPTIONAL,		
neighbouring-UMTS-CellInformation	Neighbouri	ng-UMTS-CellInformati	on OPTIONAL,		
neighbouring-GSM-CellInformation	Neighbouri	ng-GSM-CellInformatic	on OPTIONAL,		
pC-Preamble	PC-Preamble	е,			
sRB-Delay	SRB-Delay,				
iE-Extensions	ProtocolEx	tensionContainer { {S	SuccessfulRL-InformationResponse-RL-SetupFailureFDD	-ExtIEs} } OPTIONAL,	
····					
}					
SuccessfulRL-InformationResponse-RL-SetupFa	allureFDD-EX				
{ ID id-GA-CellAdditionalShapes	diastan	5	EXTENSION GA-CellAdditionalShapes	PRESENCE optional }	
{ ID id-DL-PowerBalancing-ActivationInd	alcator	2	EXTENSION DL-PowerBalancing-ActivationIndicator	PRESENCE optional }	
{ ID id-HCS-Prio	1 Estimation	5	EXTENSION HCS-Prio	PRESENCE optional }   ion PRESENCE	
{ ID id-Primary-CPICH-Usage-For-Channe	I-ESCIMACION	CRITICALITY IGNOLE	EXTENSION Primary-CPICH-Usage-For-Channel-Estimat	1011 PRESENCE	
optional }  { ID id-Secondary-CPICH-Information		CRITICALITY ignore	EXTENSION Secondary-CPICH-Information	PRESENCE optional }	
{ ID id-Active-MBMS-Bearer-ServiceFDD-1	ਸਦਾ	CRITICALITY ignore		PRESENCE optional }	
{ ID id-EDCH-RLSet-Id	FFL	5	EXTENSION RL-Set-ID	PRESENCE Optional }	
{ ID id-EDCH-FDD-DL-ControlChannelInfo:	rmation	2	EXTENSION EDCH-FDD-DL-ControlChannelInformation	PRESENCE optional }	
{ ID id-Initial-DL-DPCH-TimingAdjustment			EXTENSION DL-DPCH-TimingAdjustment	PRESENCE optional }	
{ ID id-Neighbouring-E-UTRA-CellInformation			EXTENSION DE-Dren-TimingAdJuscment EXTENSION Neighbouring-E-UTRA-CellInformation	PRESENCE optional }	
{ ID id-HSDSCH-PreconfigurationInfo	401011		EXTENSION HSDSCH-PreconfigurationInfo	PRESENCE optional }	
{ ID id-F-DPCH-SlotFormat			EXTENSION F-DPCH-SlotFormat	PRESENCE optional }	
{ ID id-Non-Serving-RL-Preconfig-Info		-	EXTENSION Non-Serving-RL-Preconfig-Info	PRESENCE optional }	
{ ID id-Neighbouring-UMTS-CellInformat:	ion-Ext	-	EXTENSION Neighbouring-UMTS-CellInformation-Ext	PRESENCE optional },	
( 15 14 heighbouring onto certinior	IOII LAC	entitemiti ignore	ENTENDION Neighbouring onto certificormacion Exc	indenned operendir j,	
}					
)					
DiversityIndication-RL-SetupFailureFDD ::=	CHOICE {				
	ing-RL-Setup	FailureFDD,			
nonCombiningOrFirstRL NonCombinin	ngOrFirstRL-1	RL-SetupFailureFDD			
}	5	÷			
·					
Combining-RL-SetupFailureFDD ::= SEQUENCE	{				
rL-ID RL-ID,					

```
ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
CombiningItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DCH-InformationResponse
                                          CRITICALITY ignore EXTENSION DCH-InformationResponse
                                                                                                            PRESENCE optional
    { ID id-EDCH-FDD-InformationResponse
                                          CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                                   PRESENCE optional
                                                                                                                                         },
    . . .
}
NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
    dCH-InformationResponse
                                          DCH-InformationResponse,
   iE-Extensions
                                          ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    . . .
}
NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EDCH-FDD-InformationResponse
                                          CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                                   PRESENCE optional
                                                                                                                                         },
   . . .
}
RadioLinkSetupFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    - -
-- RADIO LINK SETUP FAILURE TDD
        ******
RadioLinkSetupFailureTDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{RadioLinkSetupFailureTDD-IEs}},
                                  ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}}
   protocolExtensions
                                                                                                                    OPTIONAL,
    . . .
RadioLinkSetupFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-CauseLevel-RL-SetupFailureTDD CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureTDD
                                                                                                            PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                            PRESENCE optional
                                                                                                                                  },
    . . .
}
CauseLevel-RL-SetupFailureTDD ::= CHOICE {
                       GeneralCauseList-RL-SetupFailureTDD,
    generalCause
                       RLSpecificCauseList-RL-SetupFailureTDD,
   rLSpecificCause
    . . .
ļ
GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
   cause
                              Cause,
   iE-Extensions
                              ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs } }
                                                                                                                   OPTIONAL,
    . . .
```

```
GeneralCauseItem-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RLSpecificCauseList-RL-SetupFailureTDD ::= SEQUENCE {
   unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD,
   iE-Extensions
                                                         ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs } }
   OPTIONAL,
    . . .
RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-SixtyfourQAM-DL-SupportIndicator
                                            CRITICALITY ignore
                                                                    EXTENSION SixtyfourQAM-DL-SupportIndicator
                                                                                                                         PRESENCE optional },
    . . .
}
Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD}
J
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD
                                                                        CRITICALITY iqnore
                                                                                            TYPE
                                                                                                   UnsuccessfulRL-InformationResponse-RL-
SetupFailureTDD
                  PRESENCE
                              mandatory
}
UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD ::= SEQUENCE {
                              RL-ID,
   rL-ID
   cause
                              Cause,
                              ProtocolExtensionContainer { { UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RadioLinkSetupFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    -- RADIO LINK ADDITION REQUEST FDD
      RadioLinkAdditionRequestFDD ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                            {{RadioLinkAdditionRequestFDD-IEs}},
   protocolExtensions
                                 ProtocolExtensionContainer {{RadioLinkAdditionRequestFDD-Extensions}}
                                                                                                                      OPTIONAL,
    . . .
}
RadioLinkAdditionRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-SIRTarget
                                                                                                          }
                                     CRITICALITY reject TYPE UL-SIR
                                                                                   PRESENCE mandatory
```

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ID id-RL-InformationList-RL-AdditionRgstFDD CRITICALITY notify TYPE RL-InformationList-RL-AdditionRgstFDD PRESENCE mandatory }| ID id-Active-Pattern-Sequence-Information CRITICALITY reject TYPE Active-Pattern-Sequence-Information PRESENCE optional }, . . . RL-InformationList-RL-AdditionRgstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-Information-RL-AdditionRgstFDD-IEs } } RL-Information-RL-AdditionRqstFDD-IEs RNSAP-PROTOCOL-IES ::= { { ID id-RL-Information-RL-AdditionRqstFDD CRITICALITY notify TYPE RL-Information-RL-AdditionRqstFDD PRESENCE mandatory RL-Information-RL-AdditionRgstFDD ::= SEQUENCE { rL-ID RL-ID. c-ID C-ID. frameOffset. FrameOffset. chipOffset ChipOffset, diversityControlField DiversityControlField, primaryCPICH-EcNo PrimaryCPICH-EcNo OPTIONAL, not-Used-sSDT-CellID NULL OPTIONAL, transmitDiversitvIndicator TransmitDiversitvIndicator OPTIONAL, ProtocolExtensionContainer { {RL-Information-RL-AdditionRgstFDD-ExtIEs} } OPTIONAL, iE-Extensions RL-Information-RL-AdditionRgstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= ID id-DLReferencePower CRITICALITY ignore EXTENSION DL-Power PRESENCE optional } ID id-Enhanced-PrimaryCPICH-EcNo CRITICALITY ignore EXTENSION Enhanced-PrimaryCPICH-EcNo PRESENCE optional 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-RL-Specific-EDCH-Information EXTENSION RL-Specific-EDCH-Information PRESENCE optional CRITICALITY reject ID id-EDCH-RL-Indication CRITICALITY reject EXTENSION EDCH-RL-Indication PRESENCE optional ID id-SynchronisationIndicator CRITICALITY ignore EXTENSION SynchronisationIndicator 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-FTPICH-Information CRITICALITY ignore EXTENSION FTPICH-Information PRESENCE optional }, . . . RadioLinkAdditionRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { ID id-DPC-Mode PRESENCE optional } CRITICALITY reject EXTENSION DPC-Mode ID id-Permanent-NAS-UE-Identity CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity PRESENCE optional } ID id-Serving-EDCHRL-Id CRITICALITY reject EXTENSION EDCH-Serving-RL PRESENCE optional} ID id-Initial-DL-DPCH-TimingAdjustment-Allowed CRITICALITY iqnore EXTENSION Initial-DL-DPCH-TiminqAdjustment-Allowed PRESENCE optional} ID id-HS-DSCH-serving-cell-change-information CRITICALITY reject EXTENSION HS-DSCH-serving-cell-change-information PRESENCE optional } ID id-Serving-cell-change-CFN PRESENCE optional } CRITICALITY reject EXTENSION CFN ID id-EDPCH-Information CRITICALITY reject EXTENSION EDPCH-Information-RLAdditionReg-FDD PRESENCE optional } CRITICALITY reject EXTENSION EDCH-FDD-Information PRESENCE optional } ID id-EDCH-FDD-Information ID id-Additional-HS-Cell-Information-RL-Addition CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Addition-List PRESENCE optional}| -- This IE shall be present if E-DPCH Information is present ID id-UE-AggregateMaximumBitRate CRITICALITY ignore EXTENSION UE-AggregateMaximumBitRate PRESENCE optional } { ID id-Additional-EDCH-Cell-Information-RL-Add-Req CRITICALITY reject EXTENSION Additional-EDCH-Cell-Information-RL-Add-Req PRESENCE optional}

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```
{ ID id-UL-CLTD-Information
                                                        CRITICALITY reject EXTENSION UL-CLTD-Information
                                                                                                                                 PRESENCE optional },
Additional-HS-Cell-Information-RL-Addition-List ::= SEQUENCE (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 RNSAP-PROTOCOL-EXTENSION ::= {
}
Additional-EDCH-Cell-Information-RL-Add-Reg ::=SEQUENCE{
    setup-Or-Addition-Of-EDCH-On-secondary-UL-Frequency
                                                                                 Setup-Or-Addition-Of-EDCH-On-secondary-UL-Frequency,
                                    ProtocolExtensionContainer { { Additional-EDCH-Cell-Information-RL-Add-Reg-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
Additional-EDCH-Cell-Information-RL-Add-Reg-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Setup-Or-Addition-Of-EDCH-On-secondary-UL-Frequency::= CHOICE {
                   Additional-EDCH-Setup-Info,
    setup
    addition
                    Additional-EDCH-Cell-Information-To-Add-List,
    . . .
EDPCH-Information-RLAdditionReg-FDD::= 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
                                                HARO-Info-for-E-DCH,
    iE-Extensions
                                                ProtocolExtensionContainer { { EDPCH-Information-RLAdditionReg-FDD-ExtIEs } }
                                                                                                                                         OPTIONAL,
    . . .
}
EDPCH-Information-RLAdditionReg-FDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-HSDSCH-Configured-Indicator
                                                                                                                     PRESENCE mandatory }
                                        CRITICALITY reject EXTENSION HSDSCH-Configured-Indicator
-- 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 { ProtocolIE-Container {{RadioLinkAdditionRequestTDD-IEs}}, protocolIEs protocolExtensions ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}} OPTIONAL, . . . } RadioLinkAdditionRequestTDD-IEs RNSAP-PROTOCOL-IES ::= { { ID id-RL-Information-RL-AdditionRgstTDD CRITICALITY reject TYPE RL-Information-RL-AdditionRgstTDD PRESENCE mandatory }, . . . RL-Information-RL-AdditionRqstTDD ::= SEQUENCE { rL-TD RL-ID, C-TD C-ID, frameOffset FrameOffset, diversityControlField DiversityControlField, primaryCCPCH-RSCP PrimaryCCPCH-RSCP OPTIONAL, dL-TimeSlot-ISCP-Info DL-TimeSlot-ISCP-Info OPTIONAL, --for 3.84Mcps TDD only iE-Extensions ProtocolExtensionContainer { {RL-Information-RL-AdditionRgstTDD-ExtIEs} } OPTIONAL, . . . RL-Information-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD CRITICALITY reject EXTENSION DL-TimeSlot-ISCP-LCR-Information PRESENCE optional }| --for 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-PrimaryCCPCH-RSCP-Delta CRITICALITY ignore EXTENSION PrimaryCCPCH-RSCP-Delta PRESENCE optional } { ID id-IdleIntervalConfigurationIndicator CRITICALITY ignore PRESENCE optional }, EXTENSION NULL . . . RadioLinkAdditionRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { ID id-Permanent-NAS-UE-Identity CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity PRESENCE optional } | ID id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD CRITICALITY notify EXTENSION UL-CCTrCH-InformationList-RL-AdditionRgstTDD PRESENCE optional} { ID id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD CRITICALITY notify EXTENSION DL-CCTrCH-InformationList-RL-AdditionRqstTDD PRESENCE optional } ID id-HSDSCH-TDD-Information CRITICALITY reject EXTENSION HSDSCH-TDD-Information PRESENCE optional } ID id-HSPDSCH-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE optional } ID id-E-DCH-Information CRITICALITY reject EXTENSION E-DCH-Information PRESENCE optional } PRESENCE optional } ID id-E-DCH-Serving-RL-ID CRITICALITY reject 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-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 } | ID id-DCH-MeasurementType-Indicator CRITICALITY reject EXTENSION DCH-MeasurementType-Indicator PRESENCE optional } ID id-Multi-Carrier-EDCH-Setup PRESENCE optional} CRITICALITY reject EXTENSION Multi-Carrier-EDCH-Info ID id-MU-MIMO-Indicator CRITICALITY reject EXTENSION MU-MIMO-Indicator PRESENCE optional }, . . . 3 UL-CCTrCH-InformationList-RL-AdditionRgstTDD := SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-InformationItemIEs-RL-AdditionRgstTDD} } UL-CCTrCH-InformationItemIEs-RL-AdditionRqstTDD RNSAP-PROTOCOL-IES ::= { { ID id-UL-CCTrCH-InformationItem-RL-AdditionRgstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationItem-RL-AdditionRgstTDD PRESENCE optional}, . . . UL-CCTrCH-InformationItem-RL-AdditionRgstTDD ::= SEQUENCE { cCTrCH-ID CCTrCH-ID, uplinkStepSizeLCR TDD-TPC-UplinkStepSize-LCR OPTIONAL, -- Applicable to 1.28Mcps TDD only iE-Extensions ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-AdditionRgstTDD-ExtIEs} } OPTIONAL, . . . UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . := SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-DL-CCTrCH-InformationList-RL-AdditionRqstTDD InformationItemIEs-RL-AdditionRqstTDD } } DL-CCTrCH-InformationItemIEs-RL-AdditionRqstTDD RNSAP-PROTOCOL-IES ::= { { ID id-DL-CCTrCH-InformationItem-RL-AdditionRgstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationItem-RL-AdditionRgstTDD PRESENCE optional}, . . . DL-CCTrCH-InformationItem-RL-AdditionRgstTDD ::= SEQUENCE cCTrCH-ID CCTrCH-ID, downlinkStepSize TDD-TPC-DownlinkStepSize OPTIONAL, ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL, iE-Extensions DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . .

```
-- RADIO LINK ADDITION RESPONSE FDD
RadioLinkAdditionResponseFDD ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                            {{RadioLinkAdditionResponseFDD-IEs}},
                                  ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}}
   protocolExtensions
                                                                                                                       OPTIONAL,
    . . .
RadioLinkAdditionResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseList-RL-AdditionRspFDD
                                                         CRITICALITY ignore TYPE RL-InformationResponseList-RL-AdditionRspFDD
    PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics
                                         CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                            PRESENCE optional
                                                                                                                  },
    . . .
J
RL-InformationResponseList-RL-AdditionRspFDD
                                                 ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-
InformationResponseItemIEs-RL-AdditionRspFDD }
RL-InformationResponseItemIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-AdditionRspFDD
                                                            CRITICALITY ignore TYPE RL-InformationResponseItem-RL-AdditionRspFDD PRESENCE
mandatory }
RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE
    rL-ID
                                  RL-ID,
   rL-Set-ID
                                  RL-Set-ID,
   uRA-Information
                                  URA-Information
                                                     OPTIONAL,
    sAT
                                  SAI,
                                  GA-Cell
   qA-Cell
                                             OPTIONAL,
                                  GA-AccessPointPosition OPTIONAL,
    qA-AccessPointPosition
    received-total-wide-band-power Received-total-wide-band-power,
   not-Used-secondary-CCPCH-Info
                                         NULL
                                                    OPTIONAL,
    dl-CodeInformation
                                  DL-CodeInformationList-RL-AdditionRspFDD,
    diversityIndication
                                  DiversityIndication-RL-AdditionRspFDD,
    sSDT-SupportIndicator
                                      SSDT-SupportIndicator,
   minUL-SIR
                                     UL-SIR,
   maxUL-SIR
                                      UL-SIR,
    closedlooptimingadjustmentmode
                                      Closedlooptimingadjustmentmode OPTIONAL,
   maximumAllowedULTxPower
                                     MaximumAllowedULTxPower,
   maximumDLTxPower
                                     DL-Power,
   minimumDLTxPower
                                      DL-Power,
   neighbouring-UMTS-CellInformation
                                     Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation
                                     Neighbouring-GSM-CellInformation OPTIONAL,
                                      PC-Preamble,
   pC-Preamble
    sRB-Delay
                                      SRB-Delay,
    primaryCPICH-Power
                                      PrimaryCPICH-Power,
    iE-Extensions
                                      ProtocolExtensionContainer { {RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
```

```
RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                    CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                                PRESENCE optional }
      ID id-DL-PowerBalancing-ActivationIndicator
                                                    CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                                PRESENCE optional
     ID id-HCS-Prio
                                                                                                                                PRESENCE optional
                                                    CRITICALITY ignore EXTENSION HCS-Prio
     ID id-Active-MBMS-Bearer-ServiceFDD-PFL
                                                    CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListFDD-PFL
                                                                                                                                PRESENCE optional
                                                    CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                                PRESENCE optional
      ID id-EDCH-RLSet-Id
     ID id-EDCH-FDD-DL-ControlChannelInformation
                                                    CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation
                                                                                                                                PRESENCE optional
      ID id-Initial-DL-DPCH-TimingAdjustment
                                                    CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                                PRESENCE optional
     ID id-F-DPCH-SlotFormat
                                                    CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                                                PRESENCE optional
     ID id-Neighbouring-E-UTRA-CellInformation
                                                    CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                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
     ID id-Neighbouring-UMTS-CellInformation-Ext
                                                    CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                PRESENCE optional }
     ID id-FTPICH-Information-Response
                                                    CRITICALITY ignore EXTENSION FTPICH-Information-Response
                                                                                                                                PRESENCE optional },
    . . .
DL-CodeInformationList-RL-AdditionRspFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-AdditionRspFDD }}
DL-CodeInformationListIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-FDD-DL-CodeInformation CRITICALITY ignore TYPE FDD-DL-CodeInformation
                                                                                        PRESENCE mandatory }
DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
                                    Combining-RL-AdditionRspFDD,
    combining
    nonCombining
                                    NonCombining-RL-AdditionRspFDD
Combining-RL-AdditionRspFDD ::= SEQUENCE {
    rL-TD
                                RL-ID,
    iE-Extensions
                                ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    . . .
CombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DCH-InformationResponse
                                            CRITICALITY ignore EXTENSION DCH-InformationResponse
                                                                                                                 PRESENCE optional
     ID id-EDCH-FDD-InformationResponse
                                            CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                                        PRESENCE optional
                                                                                                                                               },
    . . .
}
NonCombining-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-InformationResponse
                                            DCH-InformationResponse,
                                                ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
NonCombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EDCH-FDD-InformationResponse
                                           CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                                        PRESENCE optional
                                                                                                                                               },
    . . .
}
```

```
RadioLinkAdditionResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

{ ID id-HS-DSCH-serving-cell-change-informationResponse CRITICALITY ignore EXTENSION HS-DSCH-serving-cell-change-informationResponse PRESENCE optional } | ID id-E-DCH-Serving-cell-change-informationResponse CRITICALITY ignore EXTENSION E-DCH-Serving-cell-change-informationResponse 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 } | { ID id-Additional-EDCH-Cell-Information-Response-RLAdd CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-RLAddList 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 ::=SEOUENCE{ hSPDSCH-RL-ID RL-ID, hSDSCH-RNTI HSDSCH-RNTI, 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 RNSAP-PROTOCOL-EXTENSION ::= { -- RADIO LINK ADDITION RESPONSE TDD RadioLinkAdditionResponseTDD ::= SEQUENCE { protocolIEs ProtocolIE-Container {{RadioLinkAdditionResponseTDD-IEs}}, protocolExtensions ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}} OPTIONAL, . . . RadioLinkAdditionResponseTDD-IEs RNSAP-PROTOCOL-IES ::= { ID id-RL-InformationResponse-RL-AdditionRspTDD CRITICALITY ignore TYPE RL-InformationResponse-RL-AdditionRspTDD PRESENCE optional --Mandatory for 3.84Mcps TDD only { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }, . . . RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE { rL-ID RL-ID, uRA-Information URA-Information OPTIONAL,

```
SAI,
    sAI
    gA-Cell
                                        GA-Cell
                                                    OPTIONAL.
    qA-AccessPointPosition
                                        GA-AccessPointPosition OPTIONAL.
                                        UL-TimeSlot-ISCP-Info,
    ul-TimeSlot-ISCP-Info
    minUL-SIR
                                        UL-SIR.
    maxUL-SIR
                                        UL-SIR,
    maximumAllowedULTxPower
                                        MaximumAllowedULTxPower,
    maximumDLTxPower
                                        DL-Power,
    minimumDLTxPower
                                        DL-Power,
    pCCPCH-Power
                                        PCCPCH-Power,
    timingAdvanceApplied
                                        TimingAdvanceApplied,
    alphaValue
                                        AlphaValue,
    ul-PhysCH-SF-Variation
                                        UL-PhysCH-SF-Variation,
    synchronisationConfiguration
                                        SynchronisationConfiguration,
    secondary-CCPCH-Info-TDD
                                        Secondary-CCPCH-Info-TDD
                                                                                         OPTIONAL,
    ul-CCTrCHInformation
                                        UL-CCTrCHInformationList-RL-AdditionRspTDD
                                                                                         OPTIONAL,
    dl-CCTrCHInformation
                                        DL-CCTrCHInformationList-RL-AdditionRspTDD
                                                                                         OPTIONAL,
    dCH-Information
                                        DCH-Information-RL-AdditionRspTDD
                                                                                         OPTIONAL,
                                        DSCH-InformationResponse-RL-AdditionRspTDD
    dSCH-InformationResponse
                                                                                         OPTIONAL,
                                        USCH-InformationResponse-RL-AdditionRspTDD
                                                                                         OPTIONAL,
    uSCH-InformationResponse
    neighbouring-UMTS-CellInformation
                                        Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation
                                        Neighbouring-GSM-CellInformation OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    . . .
RL-InformationResponse-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-GA-CellAdditionalShapes
                                                     CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                                 PRESENCE optional }
      ID id-HCS-Prio
                                                     CRITICALITY ignore EXTENSION HCS-Prio
                                                                                                                                 PRESENCE optional
      ID id-Neighbouring-E-UTRA-CellInformation
                                                    CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                 PRESENCE optional }
      ID id-Neighbouring-UMTS-CellInformation-Ext CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                 PRESENCE optional },
    . . .
UL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}
UL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD CRITICALITY ignore TYPE UL-CCTrCHInformationListIE-RL-AdditionRspTDD
    PRESENCE mandatory }
}
UL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-AdditionRspTDD
UL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
                                    UL-DPCH-InformationList-RL-AdditionRspTDD
    ul-DPCH-Information
                                                                                     OPTIONAL,
                                    ProtocolExtensionContainer { { UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL.
    iE-Extensions
    . . .
UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

UL-DPCH-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-AdditionRspTDD} }

```
UL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
      ID id-UL-DPCH-InformationItem-RL-AdditionRspTDD
                                                            CRITICALITY ignore TYPE UL-DPCH-InformationItem-RL-AdditionRspTDD PRESENCE mandatory
}
UL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
                                    RepetitionLength,
    repetitionLength
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    uL-Timeslot-Information
                                    UL-Timeslot-Information,
    iE-Extensions
                                    ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    . . .
UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCHInformationList-RL-AdditionRspTDD ::= Protocolle-Single-Container {{DL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}
DL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD CRITICALITY ignore TYPE DL-CCTrCHInformationListIE-RL-AdditionRspTDD
    PRESENCE mandatory }
}
DL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-AdditionRspTDD
DL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
    dl-DPCH-Information
                                    DL-DPCH-InformationList-RL-AdditionRspTDD
                                                                                     OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    . . .
DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD
                                                                                                                                 }| -- this is a DCH
                                                            CRITICALITY ignore
                                                                                     EXTENSION DL-Power
                                                                                                            PRESENCE optional
type CCTrCH power
    { ID id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD
                                                            CRITICALITY ignore
                                                                                     EXTENSION DL-Power
                                                                                                            PRESENCE optional
                                                                                                                                 }, -- this is a DCH
type CCTrCH power
DL-DPCH-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-AdditionRspTDD } }
DL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
      ID id-DL-DPCH-InformationItem-RL-AdditionRspTDD
                                                            CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-AdditionRspTDD PRESENCE mandatory
}
DL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
                                    RepetitionLength,
    repetitionLength
```

```
tDD-DPCHOffset
                                    TDD-DPCHOffset,
    dL-Timeslot-Information
                                    DL-Timeslot-Information,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    . . .
DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
    diversityIndication
                                        DiversityIndication-RL-AdditionRspTDD,
    iE-Extensions
                                    ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    . . .
3
DCH-Information-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
                    Combining-RL-AdditionRspTDD,
    combining
                  NonCombining-RL-AdditionRspTDD
    nonCombining
Combining-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID
                                RL-ID,
                                ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
CombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DCH-InformationResponse
                                            CRITICALITY ignore EXTENSION DCH-InformationResponse
                                                                                                                  PRESENCE optional
                                                                                                                                          },
    . . .
NonCombining-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse
                                DCH-InformationResponse,
    iE-Extensions
                                    ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    . . .
}
NonCombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DSCH-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DSCH-InformationListIEs-RL-AdditionRspTDD}}
DSCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationListIE-RL-AdditionRspTDD
                                                      CRITICALITY ignore TYPE DSCH-InformationListIE-RL-AdditionRspTDD
                                                                                                                                          PRESENCE
mandatory }
```

DSCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCHInformationItem-RL-AdditionRspTDD

```
DSCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    dsch-ID
                           DSCH-ID.
    transportFormatManagement TransportFormatManagement,
    dSCH-FlowControlInformation
                                    DSCH-FlowControlInformation,
    diversityIndication
                         DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
    -- diversityIndication present, if CHOICE = nonCombining
    iE-Extensions
                    ProtocolExtensionContainer { {DSCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
DSCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-AdditionRspTDD2 ::= SEQUENCE {
    bindingID
                           BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
                           ProtocolExtensionContainer { {DiversityIndication-RL-AdditionRspTDD2-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
DiversityIndication-RL-AdditionRspTDD2-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
USCH-InformationResponse-RL-AdditionRspTDD ::= Protocolle-Single-Container {{USCH-InformationListles-RL-AdditionRspTDD}}
USCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationListIE-RL-AdditionRspTDD
                                                       CRITICALITY ignore TYPE USCH-InformationListIE-RL-AdditionRspTDD
                                                                                                                                       PRESENCE
mandatory }
USCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCHInformationItem-RL-AdditionRspTDD
USCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    uSCH-ID
                           USCH-ID,
    transportFormatManagement TransportFormatManagement,
                           DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
    diversityIndication
    -- diversityIndication present, if CHOICE = nonCombining
                           ProtocolExtensionContainer { {USCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
USCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
RadioLinkAdditionResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-LCR-InformationResponse-RL-AdditionRspTDD CRITICALITY ignore EXTENSION RL-LCR-InformationResponse-RL-AdditionRspTDD
    PRESENCE optional } |
    --Mandatory for 1.28Mcps TDD only
     ID id-Active-MBMS-Bearer-ServiceTDD-PFL
                                                    CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListTDD-PFL
                                                                                                                               PRESENCE optional }
    { ID id-HSDSCH-TDD-Information-Response
                                                                                                                               PRESENCE optional }
                                                    CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response
```

ID id-DSCH-RNTI CRITICALITY ignore EXTENSION DSCH-RNTI PRESENCE optional } ID id-RL-InformationResponse-RL-AdditionRspTDD768 CRITICALITY ignore EXTENSION RL-InformationResponse-RL-AdditionRspTDD768 PRESENCE optional} ID id-E-DCH-Information-Response CRITICALITY ignore EXTENSION E-DCH-Information-Response PRESENCE optional } ID id-E-DCH-768-Information-Response CRITICALITY ignore EXTENSION E-DCH-768-Information-Response PRESENCE optional } ID id-E-DCH-LCR-Information-Response EXTENSION E-DCH-LCR-Information-Response PRESENCE optional CRITICALITY ignore 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-DCH-MeasurementOccasion-Information CRITICALITY reject EXTENSION DCH-MeasurementOccasion-Information PRESENCE optional } ID id-Multi-Carrier-EDCH-Response CRITICALITY ignore EXTENSION Multi-Carrier-EDCH-Information-Response PRESENCE optional } ID id-MU-MIMO-InformationLCR CRITICALITY reject EXTENSION MU-MIMO-InformationLCR PRESENCE optional }, RL-LCR-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE rL-ID RL-ID. uRA-Information URA-Information, sAT SAI, qA-Cell GA-Cell OPTIONAL, qA-AccessPointPosition GA-AccessPointPosition OPTIONAL, UL-TimeSlot-ISCP-LCR-Info, ul-TimeSlot-ISCP-LCR-Info maxUL-SIR UL-SIR. UL-SIR, minUL-SIR pCCPCH-Power PCCPCH-Power, MaximumAllowedULTxPower, maximumAllowedULTxPower maximumDLTxPower DL-Power, minimumDLTxPower DL-Power, AlphaValue, alphaValue ul-PhysCH-SF-Variation UL-PhysCH-SF-Variation, synchronisationConfiguration SynchronisationConfiguration, Secondary-LCR-CCPCH-Info-TDD secondary-LCR-CCPCH-Info-TDD OPTIONAL. ul-CCTrCH-LCR-Information UL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD OPTIONAL, dl-CCTrCH-LCR-Information DL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD OPTIONAL, dCH-InformationResponse DCH-InformationResponseList-RL-AdditionRspTDD OPTIONAL, dsch-LCR-InformationResponse DSCH-LCR-InformationResponse-RL-AdditionRspTDD OPTIONAL, usch-LCR-InformationResponse USCH-LCR-InformationResponse-RL-AdditionRspTDD OPTIONAL, Neighbouring-UMTS-CellInformation OPTIONAL, neighbouring-UMTS-CellInformation neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation OPTIONAL. iE-Extensions ProtocolExtensionContainer { { RL-LCR-InformationResponseList-RL-AdditionRspTDD-ExtIEs } } OPTIONAL, . . . RL-LCR-InformationResponseList-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-GA-CellAdditionalShapes CRITICALITY ignore EXTENSION GA-CellAdditionalShapes PRESENCE optional } ID id-HCS-Prio PRESENCE optional CRITICALITY ignore EXTENSION HCS-Prio ID id-UL-TimingAdvanceCtrl-LCR PRESENCE optional } CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR --Mandatory for 1.28Mcps TDD only { ID id-PowerControlGAP CRITICALITY ignore EXTENSION ControlGAP PRESENCE optional }| -- Applicable to 1.28Mcps TDD only

```
{ ID id-UARFCNforNt
                                                    CRITICALITY ignore EXTENSION UARFCN
                                                                                                                                PRESENCE optional }|
    -- Applicable to 1.28Mcps TDD only
     ID id-Neighbouring-E-UTRA-CellInformation
                                                    CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                PRESENCE optional }
     ID id-IdleIntervalInformation
                                                    CRITICALITY ignore EXTENSION IdleIntervalInformation
                                                                                                                                PRESENCE optional }
    { ID id-Neighbouring-UMTS-CellInformation-Ext CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                PRESENCE optional },
    . . .
UL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD }}
UL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD CRITICALITY ignore TYPE UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD
    PRESENCE mandatory }
UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD
UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
    ul-DPCH-LCR-Information
                                        UL-DPCH-LCR-InformationList-RL-AdditionRspTDD
                                                                                            OPTIONAL.
    iE-Extensions
                                    ProtocolExtensionContainer { { UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    . . .
UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
ļ
UL-DPCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { { UL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD } }
UL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD
                                                                CRITICALITY ignore TYPE UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD PRESENCE
mandatory }
UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    uL-TimeslotLCR-Information
                                    UL-TimeslotLCR-Information,
                                    ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD}
DL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD CRITICALITY ignore TYPE DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD
PRESENCE mandatory }
```

```
DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD
DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    CCTTCH-ID
                                CCTrCH-ID.
    dl-DPCH-LCR-Information
                                DL-DPCH-LCR-InformationList-RL-AdditionRspTDD
                                                                                    OPTIONAL.
                                ProtocolExtensionContainer { {DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
۱
DL-DPCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD } }
DL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD
                                                                CRITICALITY ignore TYPE DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD PRESENCE
mandatory }
DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    dL-TimeslotLCR-Information
                                    DL-TimeslotLCR-Information,
    tSTD-Indicator
                                    TSTD-Indicator,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    . . .
DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DCH-InformationResponseListIEs-RL-AdditionRspTDD}
DCH-InformationResponseListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY ignore
                                                           TYPE DCH-InformationResponse PRESENCE mandatory }
}
DSCH-LCR-InformationResponse-RL-AdditionRspTDD ::= ProtocollE-Single-Container {{DSCH-LCR-InformationList-RL-AdditionRspTDD}}
DSCH-LCR-InformationList-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD
                                                                CRITICALITY ignore TYPE DSCH-LCR-InformationListIEs-RL-AdditionRspTDD PRESENCE
mandatory }
}
DSCH-LCR-InformationListIEs-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHsLCR)) OF DSCH-LCR-InformationItem-RL-AdditionRspTDD
DSCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    dsch-ID
                            DSCH-ID,
    dSCH-FlowControlInformation
                                    DSCH-FlowControlInformation,
    bindingID
                            BindingID OPTIONAL,
```

```
transportLayerAddress TransportLayerAddress OPTIONAL,
    transportFormatManagement TransportFormatManagement,
    iE-Extensions
                            ProtocolExtensionContainer { {DSCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    . . .
DSCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
USCH-LCR-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{USCH-LCR-InformationList-RL-AdditionRspTDD}}
USCH-LCR-InformationList-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD
                                                                 CRITICALITY ignore TYPE USCH-LCR-InformationListIEs-RL-AdditionRspTDD PRESENCE
mandatory }
}
USCH-LCR-InformationListIEs-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHsLCR)) OF USCH-LCR-InformationItem-RL-AdditionRspTDD
USCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    usch-TD
                                USCH-ID,
    transportFormatManagement
                                TransportFormatManagement,
    diversityIndication
                                DiversityIndication-RL-AdditionRspTDD2
                                                                             OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { { USCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    . . .
USCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
RL-InformationResponse-RL-AdditionRspTDD768 ::= SEQUENCE {
    rL-ID
                                        RL-ID,
    uRA-Information
                                        URA-Information
                                                             OPTIONAL,
    sAI
                                        SAI,
    qA-Cell
                                        GA-Cell
                                                     OPTIONAL,
    qA-AccessPointPosition
                                        GA-AccessPointPosition OPTIONAL,
    ul-TimeSlot-ISCP-Info
                                        UL-TimeSlot-ISCP-Info,
    minUL-SIR
                                        UL-SIR,
    maxUL-SIR
                                        UL-SIR,
    maximumAllowedULTxPower
                                        MaximumAllowedULTxPower,
    maximumDLTxPower
                                        DL-Power,
    minimumDLTxPower
                                        DL-Power,
                                        PCCPCH-Power,
    pCCPCH-Power
                                        TimingAdvanceApplied,
    timingAdvanceApplied
    alphaValue
                                        AlphaValue,
    ul-PhysCH-SF-Variation
                                        UL-PhysCH-SF-Variation,
    synchronisationConfiguration
                                        SynchronisationConfiguration,
    secondary-CCPCH-Info-TDD768
                                        Secondary-CCPCH-Info-TDD768
                                                                                         OPTIONAL,
    ul-CCTrCHInformation768
                                        UL-CCTrCHInformationList-RL-AdditionRspTDD768
                                                                                             OPTIONAL,
    dl-CCTrCHInformation768
                                        DL-CCTrCHInformationList-RL-AdditionRspTDD768
                                                                                             OPTIONAL,
    dCH-Information
                                        DCH-Information-RL-AdditionRspTDD
                                                                                         OPTIONAL,
                                        DSCH-InformationResponse-RL-AdditionRspTDD
    dSCH-InformationResponse
                                                                                         OPTIONAL,
    uSCH-InformationResponse
                                        USCH-InformationResponse-RL-AdditionRspTDD
                                                                                          OPTIONAL,
```

```
neighbouring-UMTS-CellInformation
                                        Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation
                                        Neighbouring-GSM-CellInformation OPTIONAL,
    qA-CellAdditionalShapes
                                        GA-CellAdditionalShapes
                                                                        OPTIONAL.
                                                                        OPTIONAL,
    hCS-Prio
                                        HCS-Prio
    iE-Extensions
                                        ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL,
    . . .
RL-InformationResponse-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Neighbouring-E-UTRA-CellInformation CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                PRESENCE optional }
     ID id-Neighbouring-UMTS-CellInformation-Ext CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                PRESENCE optional },
    . . .
ι
UL-CCTrCHInformationList-RL-AdditionRspTDD768 ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-AdditionRspTDD768}}
UL-CCTrCHInformationListIEs-RL-AdditionRspTDD768 RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD768 CRITICALITY ignore TYPE UL-CCTrCHInformationListIE-RL-AdditionRspTDD768
    PRESENCE mandatory }
3
UL-CCTrCHInformationListIE-RL-AdditionRspTDD768 ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-AdditionRspTDD768
UL-CCTrCHInformationItem-RL-AdditionRspTDD768 ::= SEOUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
    ul-DPCH-Information768
                                        UL-DPCH-InformationList-RL-AdditionRspTDD768
                                                                                            OPTIONAL.
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL,
    . . .
UL-CCTrCHInformationItem-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-DPCH-InformationList-RL-AdditionRspTDD768 ::= ProtocollE-Single-Container { {UL-DPCH-InformationListIEs-RL-AdditionRspTDD768 }
UL-DPCH-InformationListIEs-RL-AdditionRspTDD768 RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationItem-RL-AdditionRspTDD
                                                           CRITICALITY ignore TYPE UL-DPCH-InformationItem-RL-AdditionRspTDD768 PRESENCE
mandatory }
}
UL-DPCH-InformationItem-RL-AdditionRspTDD768 ::= SEQUENCE
    repetitionPeriod
                                        RepetitionPeriod,
                                        RepetitionLength,
    repetitionLength
    tDD-DPCHOffset
                                        TDD-DPCHOffset,
    uL-Timeslot-Information768
                                        UL-Timeslot-Information768,
   iE-Extensions
                                        ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs } } OPTIONAL,
    . . .
UL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

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DL-CCTrCHInformationList-RL-AdditionRspTDD768 ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-AdditionRspTDD768}}

```
DL-CCTrCHInformationListIEs-RL-AdditionRspTDD768 RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD768 CRITICALITY ignore TYPE DL-CCTrCHInformationListIE-RL-AdditionRspTDD768
    PRESENCE mandatory }
}
DL-CCTrCHInformationListIE-RL-AdditionRspTDD768 ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-AdditionRspTDD768
DL-CCTrCHInformationItem-RL-AdditionRspTDD768 ::= SEQUENCE {
   cCTrCH-ID
                                      CCTrCH-ID,
   dl-DPCH-Information768
                                      DL-DPCH-InformationList-RL-AdditionRspTDD768
                                                                                        OPTIONAL,
   cCTrCH-Maximum-DL-Power
                                      DL-Power
                                                 OPTIONAL, -- this is a DCH type CCTrCH power
    cCTrCH-Minimum-DL-Power
                                      DL-Power
                                                 OPTIONAL, -- this is a DCH type CCTrCH power
                                      ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-AdditionRspTDD768-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
DL-CCTrCHInformationItem-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-DPCH-InformationList-RL-AdditionRspTDD768 ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-AdditionRspTDD768 }
DL-DPCH-InformationListIEs-RL-AdditionRspTDD768 RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-RL-AdditionRspTDD768
                                                             CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-AdditionRspTDD768 PRESENCE
mandatory }
}
DL-DPCH-InformationItem-RL-AdditionRspTDD768 ::= SEQUENCE
   repetitionPeriod
                                  RepetitionPeriod,
   repetitionLength
                                  RepetitionLength,
    tDD-DPCHOffset
                                  TDD-DPCHOffset,
   dL-Timeslot-Information768
                                  DL-Timeslot-Information768,
                                  ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
DL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
    - -
-- RADIO LINK ADDITION FAILURE FDD
- -
        *****
RadioLinkAdditionFailureFDD ::= SEQUENCE {
                                                             {{RadioLinkAdditionFailureFDD-IEs}},
   protocolIEs
                                  ProtocolIE-Container
                                  ProtocolExtensionContainer {{RadioLinkAdditionFailureFDD-Extensions}}
   protocolExtensions
                                                                                                                      OPTIONAL,
    . . .
```

```
RadioLinkAdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CauseLevel-RL-AdditionFailureFDD
                                                                 CRITICALITY
                                                                                 ignore
                                                                                                    TYPE CauseLevel-RL-AdditionFailureFDD
                    PRESENCE
                                mandatory }|
    { ID id-CriticalityDiagnostics
                                            CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                    PRESENCE optional
                                                                                                                          },
    . . .
}
CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
    generalCause
                        GeneralCauseList-RL-AdditionFailureFDD,
    rLSpecificCause
                        RLSpecificCauseList-RL-AdditionFailureFDD,
    . . .
GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    cause
                                                 Cause.
    iE-Extensions
                                                 ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs } }
    OPTIONAL,
    . . .
GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                     UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
    successful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                     SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs } }
    OPTIONAL,
    . . .
RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {
{UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs} }
UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD
                                                                         CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponse-RL-
AdditionFailureFDD
                        PRESENCE mandatory }
UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEOUENCE
    rL-ID
                                    RL-ID,
    cause
                                    Cause,
    iE-Extensions
                                    ProtocolExtensionContainer { { UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL,
    . . .
UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { {SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs} }

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IES RNSAP-PROTOCOL-IES ::= {
{
 ID id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD CRITICALITY ignore TYPE SuccessfulRL-InformationResponse-RLAdditionFailureFDD PRESENCE mandatory }
}

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {

rL-ID	RL-ID.				
rL-Set-ID	RL-Set-ID,				
uRA-Information	URA-Information OPTIONAL,				
sAI	SAL,				
qA-Cell	GA-Cell OPTIONAL.				
gA-AccessPointPosition	GA-AccessPointPosition OPTIONAL,				
received-total-wide-band-power	Received-total-wide-band-power,				
not-Used-secondary-CCPCH-Info	NULL OPTIONAL,				
dl-CodeInformation	DL-CodeInformationList-RL-AdditionFailureFDD,				
diversityIndication	DiversityIndication-RL-AdditionFailureFDD,				
This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in					
the tabular message format in subclause 9.1.					
sSDT-SupportIndicator	SSDT-SupportIndicator,				
minUL-SIR	UL-SIR,				
maxUL-SIR	UL-SIR,				
closedlooptimingadjustmentmode	Closedlooptimingadjustmentmode OPTIONAL,				
maximumAllowedULTxPower	MaximumAllowedULTxPower,				
maximumDLTxPower	DL-Power,				
minimumDLTxPower	DL-Power,				
neighbouring-UMTS-CellInformation	Neighbouring-UMTS-CellInformation OPTIONAL,				
neighbouring-GSM-CellInformation	Neighbouring-GSM-CellInformation OPTIONAL,				
primaryCPICH-Power	PrimaryCPICH-Power,				
pC-Preamble	PC-Preamble,				
sRB-Delay	SRB-Delay,				
iE-Extensions	ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,				

}

. . .

. . .

}

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

{ ID	) id-GA-CellAdditionalShapes	CRITICALITY ignore	EXTENSION GA-CellAdditionalShapes	PRESENCE optional }
{ ID	) id-DL-PowerBalancing-ActivationIndicator	CRITICALITY ignore	EXTENSION DL-PowerBalancing-ActivationIndicator	PRESENCE optional }
{ ID	) id-HCS-Prio	CRITICALITY ignore	EXTENSION HCS-Prio	PRESENCE optional }
{ ID	) id-Active-MBMS-Bearer-ServiceFDD-PFL	CRITICALITY ignore	EXTENSION Active-MBMS-Bearer-Service-ListFDD-PFL	PRESENCE optional }
{ ID	) id-EDCH-RLSet-Id	CRITICALITY ignore	EXTENSION RL-Set-ID	PRESENCE optional }
{ ID	) id-EDCH-FDD-DL-ControlChannelInformation	CRITICALITY ignore	EXTENSION EDCH-FDD-DL-ControlChannelInformation	PRESENCE optional }
{ ID	) id-Initial-DL-DPCH-TimingAdjustment	CRITICALITY ignore	EXTENSION DL-DPCH-TimingAdjustment	PRESENCE optional }
{ ID	) id-Neighbouring-E-UTRA-CellInformation	CRITICALITY ignore	EXTENSION Neighbouring-E-UTRA-CellInformation	PRESENCE optional }
{ ID	) id-HSDSCH-PreconfigurationInfo	CRITICALITY ignore	EXTENSION HSDSCH-PreconfigurationInfo	PRESENCE optional }
{ ID	) id-F-DPCH-SlotFormat	CRITICALITY ignore	EXTENSION F-DPCH-SlotFormat	PRESENCE optional }
	) id-Non-Serving-RL-Preconfig-Info	CRITICALITY ignore	EXTENSION Non-Serving-RL-Preconfig-Info	PRESENCE optional }
{ ID	) id-Neighbouring-UMTS-CellInformation-Ext	CRITICALITY ignore	EXTENSION Neighbouring-UMTS-CellInformation-Ext	<pre>PRESENCE optional },</pre>

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DL-CodeInformationList-RL-AdditionFailureFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-AdditionFailureFDD }} DL-CodeInformationListIEs-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= { { ID id-FDD-DL-CodeInformation CRITICALITY ignore TYPE FDD-DL-CodeInformation PRESENCE mandatory } } DiversityIndication-RL-AdditionFailureFDD ::= CHOICE { Combining-RL-AdditionFailureFDD, combining nonCombining NonCombining-RL-AdditionFailureFDD } Combining-RL-AdditionFailureFDD ::= SEQUENCE { rL-ID RL-ID. iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL, . . . CombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= · ID id-DCH-InformationResponse CRITICALITY ignore EXTENSION DCH-InformationResponse PRESENCE optional ID id-EDCH-FDD-InformationResponse CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse PRESENCE optional }, . . . NonCombining-RL-AdditionFailureFDD ::= SEQUENCE { dCH-InformationResponse DCH-InformationResponse, iE-Extensions ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL, . . . NonCombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-EDCH-FDD-InformationResponse CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse PRESENCE optional }, . . . } RadioLinkAdditionFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { { ID id-HS-DSCH-serving-cell-change-informationResponse CRITICALITY ignore EXTENSION HS-DSCH-serving-cell-change-informationResponse PRESENCE optional } | ID id-E-DCH-Serving-cell-change-informationResponse CRITICALITY ignore EXTENSION E-DCH-Serving-cell-change-informationResponse 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 } | { ID id-Additional-EDCH-Cell-Information-Response-RLAdd CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-RLAddList PRESENCE optional }. . . . \_ \_ -- RADIO LINK ADDITION FAILURE TDD 

```
RadioLinkAdditionFailureTDD ::= SEQUENCE {
    protocolIEs
                                    ProtocolIE-Container
                                                                 {{RadioLinkAdditionFailureTDD-IEs}},
    protocolExtensions
                                    ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-Extensions}}
                                                                                                                               OPTIONAL.
    . . .
3
RadioLinkAdditionFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
      ID id-CauseLevel-RL-AdditionFailureTDD CRITICALITY ignore TYPE CauseLevel-RL-AdditionFailureTDD
                                                                                                                   PRESENCE mandatory }|
     ID id-CriticalityDiagnostics
                                            CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                    PRESENCE optional
                                                                                                                           },
    . . .
CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
    generalCause
                        GeneralCauseList-RL-AdditionFailureTDD,
    rLSpecificCause
                        RLSpecificCauseList-RL-AdditionFailureTDD,
    . . .
GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    cause
                                Cause,
    iE-Extensions
                                ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs} } 
                                                                                                                           OPTIONAL,
    . . .
GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs RNSAP-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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-
AdditionFailureTDD } }
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD RNSAP-PROTOCOL-IES ::= {
          id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD
                                                                             CRITICALITY ignore
                                                                                                   TYPE
                                                                                                           UnsuccessfulRL-InformationResponse-RL-
    { ID
AdditionFailureTDD PRESENCE mandatory }
}
UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD ::= SEQUENCE {
    rL-ID
                                RL-ID,
    cause
                                Cause,
                                ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
```

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UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { RadioLinkAdditionFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . -- RADIO LINK DELETION REQUEST RadioLinkDeletionReguest ::= SEQUENCE { protocolIEs ProtocolIE-Container {{RadioLinkDeletionRequest-IEs}}, ProtocolExtensionContainer {{RadioLinkDeletionRequest-Extensions}} protocolExtensions OPTIONAL, . . . } RadioLinkDeletionRequest-IEs RNSAP-PROTOCOL-IES ::= { { ID id-RL-InformationList-RL-DeletionRqst CRITICALITY notify TYPE RL-InformationList-RL-DeletionRqst PRESENCE mandatory }, . . . } RL-InformationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-DeletionRqst-IEs} } RL-Information-RL-DeletionRgst-IEs RNSAP-PROTOCOL-IES ::= { { ID id-RL-Information-RL-DeletionRqst CRITICALITY notify TYPE RL-Information-RL-DeletionRqst PRESENCE mandatory RL-Information-RL-DeletionRqst ::= SEQUENCE { rL-ID RL-ID, ProtocolExtensionContainer { {RL-Information-RL-DeletionRqst-ExtIEs } } OPTIONAL, iE-Extensions . . . } RL-Information-RL-DeletionRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . 3 RadioLinkDeletionRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= . . . - --- RADIO LINK DELETION RESPONSE \_ \_ RadioLinkDeletionResponse ::= SEQUENCE { {{RadioLinkDeletionResponse-IEs}}, protocolIEs ProtocolIE-Container

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```
ProtocolExtensionContainer {{RadioLinkDeletionResponse-Extensions}}
   protocolExtensions
                                                                                                                     OPTIONAL,
RadioLinkDeletionResponse-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CriticalityDiagnostics
                                         CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                             PRESENCE optional
                                                                                                                   },
    . . .
}
RadioLinkDeletionResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
      _ _
-- RADIO LINK RECONFIGURATION PREPARE FDD
  ******
RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{RadioLinkReconfigurationPrepareFDD-IEs}},
                                  ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}
   protocolExtensions
                                                                                                                             OPTIONAL,
    . . .
RadioLinkReconfigurationPrepareFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-AllowedQueuingTime
                                      CRITICALITY reject TYPE AllowedQueuingTime
                                                                                           PRESENCE optional
     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-ReconfPredFDD CRITICALITY reject TYPE RL-InformationList-RL-ReconfPredFDD
                                                                                                           PRESENCE optional
     ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
                                                                                                                                  PRESENCE
optional },
UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
   ul-ScramblingCode
                                  UL-ScramblingCode
                                                         OPTIONAL.
   ul-SIRTarget
                                  UL-SIR
                                                         OPTIONAL,
   minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength OPTIONAL,
                                  MaxNrOfUL-DPCHs
                                                         OPTIONAL
   maxNrOfUL-DPDCHs
    -- This IE shall be present if minUL-ChannelisationCodeLength equals to 4 --,
   ul-PunctureLimit
                                  PunctureLimit
                                                         OPTIONAL,
   tFCS
                                  TFCS OPTIONAL,
   ul-DPCCH-SlotFormat
                                  UL-DPCCH-SlotFormat
                                                         OPTIONAL,
   diversityMode
                                  DiversityMode
                                                         OPTIONAL,
   not-Used-sSDT-CellIDLength
                                  NULL
                                             OPTIONAL,
    not-Used-s-FieldLength
                                  NULL
                                                 OPTIONAL,
   iE-Extensions
                                  ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    . . .
```

```
}
UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-UL-DPDCHIndicatorEDCH CRITICALITY reject
                                                            EXTENSION UL-DPDCHIndicatorEDCH PRESENCE optional
                                                                                                                 }.
    . . .
}
DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    t FCS
                                    TFCS OPTIONAL,
    dl-DPCH-SlotFormat
                                    DL-DPCH-SlotFormat
                                                            OPTIONAL,
    nrOfDLchannelisationcodes
                                    NrOfDLchannelisationcodes OPTIONAL,
    tFCI-SignallingMode
                                    TFCI-SignallingMode
                                                            OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                            OPTIONAL
    -- This IE shall be present if DL DPCH Slot Format IE is from 12 to 16 --,
    multiplexingPosition
                                    MultiplexingPosition
                                                                OPTIONAL,
   limitedPowerIncrease
                                    LimitedPowerIncrease
                                                                OPTIONAL,
                                    ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-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,
                                            ProtocolExtensionContainer { { DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
PowerOffsetInformation-RL-ReconfPrepFDD ::= SEQUENCE {
    pO1-ForTFCI-Bits
                                            PowerOffset,
                                            PowerOffset,
    pO2-ForTPC-Bits
    pO3-ForPilotBits
                                            PowerOffset,
                                            ProtocolExtensionContainer { { PowerOffsetInformation-RL-ReconfPrepFDD-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
PowerOffsetInformation-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DCH-DeleteList-RL-ReconfPrepFDD
                                            ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD
DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dCH-ID
                                    DCH-ID,
```

ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL, iE-Extensions . . . DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . RL-InformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-ReconfPrepFDD-IEs} } RL-Information-RL-ReconfPrepFDD-IEs RNSAP-PROTOCOL-IES ::= { { ID id-RL-Information-RL-ReconfPrepFDD CRITICALITY reject TYPE RL-Information-RL-ReconfPrepFDD PRESENCE mandatory RL-Information-RL-ReconfPrepFDD ::= SEQUENCE { rL-TD RL-ID. not-Used-sSDT-Indication NULL OPTIONAL, not-Used-sSDT-CellIdentity NULL OPTIONAL, transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL. -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and is not equal to "none" ProtocolExtensionContainer { {RL-Information-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL, iE-Extensions RL-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= ID id-DLReferencePower PRESENCE optional } CRITICALITY ignore EXTENSION DL-Power 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-Phase-Reference-Update-Indicator CRITICALITY ignore EXTENSION Phase-Reference-Update-Indicator PRESENCE optional ID id-RL-Specific-EDCH-Information CRITICALITY reject EXTENSION RL-Specific-EDCH-Information PRESENCE optional ID id-EDCH-RL-Indication CRITICALITY reject EXTENSION EDCH-RL-Indication 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 } ID id-FTPICH-Information-Reconf CRITICALITY ignore EXTENSION FTPICH-Information-Reconf PRESENCE optional }, RadioLinkReconfigurationPrepareFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { ID id-HSDSCH-FDD-Information PRESENCE optional} CRITICALITY reject EXTENSION HSDSCH-FDD-Information ID id-HSDSCH-Information-to-Modify PRESENCE optional CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify 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-HSPDSCH-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE optional } CRITICALITY reject EXTENSION EDPCH-Information-RLReconfPrepare-FDD PRESENCE optional ID id-EDPCH-Information PRESENCE optional } ID id-EDCH-FDD-Information CRITICALITY reject EXTENSION EDCH-FDD-Information ID id-EDCH-FDD-Information-To-Modify CRITICALITY reject EXTENSION EDCH-FDD-Information-To-Modify PRESENCE optional } ID id-EDCH-MACdFlows-To-Add CRITICALITY reject EXTENSION EDCH-MACdFlows-Information PRESENCE optional } ID id-EDCH-MACdFlows-To-Delete CRITICALITY reject EXTENSION EDCH-MACdFlows-To-Delete PRESENCE optional} ID id-Serving-EDCHRL-Id CRITICALITY reject EXTENSION EDCH-Serving-RL 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 PRESENCE optional CRITICALITY reject EXTENSION CPC-Information

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```

```
{ ID id-Additional-HS-Cell-Information-RL-Reconf-Prep
                                                            CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Reconf-Prep
    PRESENCE optional } |
     ID id-UE-AggregateMaximumBitRate
                                                             CRITICALITY ignore EXTENSION UE-AggregateMaximumBitRate
                                                                                                                                 PRESENCE optional}
     ID id-Additional-EDCH-Cell-Information-RL-Reconf-Prep CRITICALITY reject EXTENSION Additional-EDCH-Cell-Information-RL-Reconf-Prep
    PRESENCE optional } |
    { ID id-UL-CLTD-Information-Reconf
                                                             CRITICALITY reject EXTENSION UL-CLTD-Information-Reconf
                                                                                                                                 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-DSCH-Secondary-Serving-Remove OPTIONAL,
    hS-HS-DSCH-Secondary-Serving-Remove
                                    ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs-ExtIEs
                                                                RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Cell-Information-RL-Reconf-Prep ::=SEQUENCE{
    setup-Or-ConfigurationChange-Or-Removal-Of-EDCH-On-secondary-UL-Frequency
                                                                                                          Setup-Or-ConfigurationChange-Or-Removal-
Of-EDCH-On-secondary-UL-Frequency,
                                    ProtocolExtensionContainer { { Additional-EDCH-Cell-Information-RL-Reconf-Prep-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
Additional-EDCH-Cell-Information-RL-Reconf-Prep-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
F-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
                                    PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD,
    powerOffsetInformation
    fdd-dl-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 RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-F-DPCH-SlotFormatSupportRequest
                                                CRITICALITY reject
                                                                             EXTENSION F-DPCH-SlotFormatSupportRequest
                                                                                                                                 PRESENCE optional
     ID id-F-DPCH-SlotFormat
                                            CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                 PRESENCE optional },
    . . .
```

PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD ::= SEQUENCE {

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po2-ForTPC-Bits PowerOffset, --This IE shall be ignored by DRNS iE-Extensions ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL. . . . PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . \*\*\*\*\*\*\*\*\*\* \_ \_ -- RADIO LINK RECONFIGURATION PREPARE TDD RadioLinkReconfigurationPrepareTDD ::= SEQUENCE { {{RadioLinkReconfigurationPrepareTDD-IEs}}, protocolIEs ProtocolIE-Container ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}} protocolExtensions OPTIONAL. . . . RadioLinkReconfigurationPrepareTDD-IEs RNSAP-PROTOCOL-IES ::= { ID id-AllowedQueuingTime CRITICALITY reject TYPE AllowedQueuingTime PRESENCE optional } { ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY notify TYPE UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD PRESENCE optional } | { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY notify TYPE UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } | { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD CRITICALITY notify TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional } | { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY notify TYPE DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD PRESENCE optional } | { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY notify TYPE DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } | { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD CRITICALITY notify 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-ModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE DSCH-ModifyList-RL-ReconfPrepTDD PRESENCE optional ID id-DSCHs-to-Add-TDD CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional } | ID id-DSCH-DeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE DSCH-DeleteList-RL-ReconfPrepTDD PRESENCE optional ID id-USCH-ModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE USCH-ModifyList-RL-ReconfPrepTDD PRESENCE optional ID id-USCHs-to-Add CRITICALITY reject TYPE USCH-Information PRESENCE optional PRESENCE optional ID id-USCH-DeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE USCH-DeleteList-RL-ReconfPrepTDD . . . ļ ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocollE-Single-Container { { UL-CCTrCH-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD AddInformation-RL-ReconfPrepTDD-IEs } }

UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {

```
ID id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD CRITICALITY notify TYPE UL-CCTrCH-AddInformation-RL-ReconfPrepTDD
                                                                                                                                PRESENCE mandatory
}
UL-CCTrCH-AddInformation-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
    t FCS
                                TFCS,
    tFCI-Coding
                                TFCI-Coding,
    punctureLimit
                                    PunctureLimit,
                                    ProtocolExtensionContainer { { UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-SIRTarget
                                CRITICALITY reject
                                                        EXTENSION
                                                                        UL-SIR
                                                                                     PRESENCE optional } |
    -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD or 7.68Mcps TDD.
    { ID id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR
                                                                                                                                        PRESENCE
    optional },
    -- Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD
    . . .
                                                        ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
ModifyInformation-RL-ReconfPrepTDD-IEs } }
UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD CRITICALITY notify TYPE UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD
                                                                                                                                        PRESENCE
mandatory }
}
UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD ::= SEQUENCE
    cCTrCH-ID
                                CCTrCH-ID,
    t FCS
                                TECS
                                            OPTIONAL,
                               TFCI-Coding
    tFCI-Coding
                                                        OPTIONAL,
    punctureLimit
                                    PunctureLimit
                                                                OPTIONAL,
                                    ProtocolExtensionContainer { {UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                CRITICALITY reject
    { ID id-UL-SIRTarget
                                                        EXTENSION
                                                                        UL-SIR
                                                                                     PRESENCE optional } |
    -- This IE shall be applicable for 1.28Mcps TDD only.
    { ID id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD CRITICALITY reject EXTENSION
                                                                                                                 TDD-TPC-UplinkStepSize-LCR
        PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only
    . . .
UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                        ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocollE-Single-Container { {UL-CCTrCH-
DeleteInformation-RL-ReconfPrepTDD-IEs} }
UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= ·
    { ID id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD CRITICALITY notify TYPE UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD
                                                                                                                                        PRESENCE
mandatory }
```

```
}
UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                    CCTrCH-ID,
    iE-Extensions
                                   ProtocolExtensionContainer { { UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    . . .
UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                   ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocollE-Single-Container { {DL-CCTrCH-
AddInformation-RL-ReconfPrepTDD-IEs } }
DL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD CRITICALITY notify TYPE DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
                                                                                                                                      PRESENCE
mandatory }
}
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                  CCTrCH-ID,
    t FCS
                               TFCS,
                             TFCI-Coding,
    tFCI-Coding
    punctureLimit
                                PunctureLimit,
    cCTrCH-TPCList
                                   CCTrCH-TPCAddList-RL-ReconfPrepTDD OPTIONAL,
                                   ProtocolExtensionContainer { {DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD CRITICALITY reject EXTENSION
                                                                                                       TDD-TPC-DownlinkStepSize
                                                                                                                                     PRESENCE
    optional },
    . . .
CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD
CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                   CCTrCH-ID,
                                   ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                     ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
ModifyInformation-RL-ReconfPrepTDD-IEs } }
DL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= ·
    { ID id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD CRITICALITY notify TYPE DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD
    PRESENCE mandatory }
```

```
}
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                         CCTrCH-ID,
    + FCS
                             TFCS
                                           OPTIONAL,
                             TFCI-Coding
                                                       OPTIONAL,
    tFCI-Coding
                                                               OPTIONAL,
    punctureLimit
                               PunctureLimit
    cCTrCH-TPCList
                                   CCTrCH-TPCModifyList-RL-ReconfPrepTDD
                                                                                OPTIONAL,
    iE-Extensions
                                   ProtocolExtensionContainer { {DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD CRITICALITY reject
                                                                                             EXTENSION
                                                                                                                TDD-TPC-DownlinkStepSize
       PRESENCE optional },
    . . .
}
CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                   CCTrCH-ID,
   iE-Extensions
                                   ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    . . .
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                     ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
DeleteInformation-RL-ReconfPrepTDD-IEs } }
DL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD
    PRESENCE mandatory }
}
DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                               CCTrCH-ID,
                                   ProtocolExtensionContainer { {DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfPrepTDD
                                           ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD
DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID
                               DCH-ID,
    iE-Extensions
                               ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
```

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DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { } DSCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-ModifyItem-RL-ReconfPrepTDD DSCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE { dSCH-ID DSCH-ID, dl-ccTrCHID CCTrCH-ID OPTIONAL, trChSourceStatisticsDescriptor TrCH-SrcStatisticsDescr OPTIONAL, transportFormatSet TransportFormatSet OPTIONAL, allocationRetentionPriority AllocationRetentionPriority OPTIONAL, schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL, **b**LER BLER OPTIONAL, transportBearerRequestIndicator TransportBearerRequestIndicator, ProtocolExtensionContainer { {DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL, iE-Extensions . . . DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-TrafficClass CRITICALITY ignore EXTENSION TrafficClass PRESENCE optional }| { ID id-BindingID CRITICALITY ignore EXTENSION BindingID PRESENCE optional }| -- Shall be ignored if bearer establishment with ALCAP. { ID id-TransportLayerAddress CRITICALITY ignore TransportLayerAddress PRESENCE optional }| EXTENSION -- Shall be ignored if bearer establishment with ALCAP. { ID id-TnlOos CRITICALITY ignore EXTENSION Tnl0os PRESENCE optional }, -- Shall be ignored if bearer establishment with ALCAP. . . . } DSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-DeleteItem-RL-ReconfPrepTDD DSCH-DeleteItem-RL-ReconfPrepTDD ::= SEOUENCE { dSCH-ID DSCH-ID, iE-Extensions ProtocolExtensionContainer { {DSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL, DSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . USCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCH-ModifyItem-RL-ReconfPrepTDD USCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE { uSCH-ID USCH-ID, ul-ccTrCHID CCTrCH-ID OPTIONAL, trChSourceStatisticsDescriptor TrCH-SrcStatisticsDescr OPTIONAL, OPTIONAL, transportFormatSet TransportFormatSet allocationRetentionPriority AllocationRetentionPriority OPTIONAL, schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL, bler BLER OPTIONAL,

```
transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
    rb-Info
                                        RB-Info
                                                                        OPTIONAL.
    iE-Extensions
                                        ProtocolExtensionContainer { {USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    . . .
USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-TrafficClass
                                   CRITICALITY ignore EXTENSION TrafficClass
                                                                                            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-TnlOos
                                        CRITICALITY
                                                        ignore
                                                                    EXTENSION
                                                                                Tnl0os
                                                                                            PRESENCE
                                                                                                                 optional
                                                                                                                                }.
    . . .
USCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCH-DeleteItem-RL-ReconfPrepTDD
USCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID
                                        USCH-ID.
    iE-Extensions
                                    ProtocolExtensionContainer { {USCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    . . .
USCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RadioLinkReconfigurationPrepareTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION PrimaryCCPCH-RSCP
                                                                                                                         PRESENCE optional }
     ID id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-TimeSlot-ISCP-Info
                                                                                                                         PRESENCE optional }
     ID id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Timeslot-ISCP-LCR-Information 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
                                                CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                         PRESENCE optional
     ID id-HSDSCH-MACdFlows-to-Add
                                                                                                                         PRESENCE optional
     ID id-HSDSCH-MACdFlows-to-Delete
                                                CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
     ID id-HSPDSCH-RL-ID
                                                CRITICALITY reject EXTENSION RL-ID
                                                                                                                         PRESENCE optional }
     ID id-PDSCH-RL-ID
                                                CRITICALITY ignore EXTENSION RL-ID
                                                                                                                         PRESENCE optional }
                                                                                                                         PRESENCE optional
     ID id-UL-Synchronisation-Parameters-LCR
                                                CRITICALITY ignore EXTENSION UL-Synchronisation-Parameters-LCR
-- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
     ID id-RL-Information-RL-ReconfPrepTDD
                                                                                                                         PRESENCE optional }
                                                CRITICALITY ignore EXTENSION RL-Information-RL-ReconfPrepTDD
     ID id-PrimaryCCPCH-RSCP-Delta
                                                                                                                         PRESENCE optional
                                                CRITICALITY ignore EXTENSION PrimaryCCPCH-RSCP-Delta
     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
                                                                                                                         PRESENCE optional }
                                                CRITICALITY reject EXTENSION E-DCH-LCR-Information-Reconfig
     ID id-NeedforIdleInterval
                                                                                                                         PRESENCE optional }
                                                CRITICALITY ignore EXTENSION NeedforIdleInterval
                                                                                                                         PRESENCE optional }
     ID id-CPC-InformationLCR
                                                CRITICALITY reject EXTENSION CPC-InformationLCR
                                                CRITICALITY ignore EXTENSION RNTI-Allocation-Indicator
     ID id-RNTI-Allocation-Indicator
                                                                                                                         PRESENCE optional }
     ID id-DCH-MeasurementType-Indicator
                                                CRITICALITY reject EXTENSION DCH-MeasurementType-Indicator
                                                                                                                         PRESENCE optional}
     ID id-Multi-Carrier-EDCH-Reconfigure
                                                CRITICALITY reject EXTENSION Multi-Carrier-EDCH-Reconfigure
                                                                                                                         PRESENCE optional }
     ID id-MU-MIMO-Indicator
                                                CRITICALITY reject EXTENSION MU-MIMO-Indicator
                                                                                                                         PRESENCE optional }
```

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RL-Information-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF RL-InformationIE-RL-ReconfPrepTDD
RL-InformationIE-RL-ReconfPrepTDD ::= SEQUENCE {
    rL-ID
                                      RL-ID,
   rL-Specific-DCH-Info
                                      RL-Specific-DCH-Info
                                                                     OPTIONAL,
   iE-Extensions
                                      ProtocolExtensionContainer { { RL-InformationIE-RL-ReconfPrepTDD-ExtIEs } }
                                                                                                                  OPTIONAL,
RL-InformationIE-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
           -- RADIO LINK RECONFIGURATION READY FDD
_ _
RadioLinkReconfigurationReadyFDD ::= SEQUENCE {
                                                            {{RadioLinkReconfigurationReadyFDD-IEs}},
   protocolIEs
                                  ProtocolIE-Container
                                  ProtocolExtensionContainer {{RadioLinkReconfigurationReadyFDD-Extensions}}
   protocolExtensions
                                                                                                                           OPTIONAL,
    . . .
}
RadioLinkReconfigurationReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseList-RL-ReconfReadyFDD CRITICALITY ignore TYPE RL-InformationResponseList-RL-ReconfReadyFDD
    PRESENCE optional } |
                                         CRITICALITY ignore TYPE CriticalityDiagnostics
    { ID id-CriticalityDiagnostics
                                                                                             PRESENCE optional
                                                                                                                  },
    . . .
RL-InformationResponseList-RL-ReconfReadyFDD
                                                 ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponse-
RL-ReconfReadyFDD-IEs } }
RL-InformationResponse-RL-ReconfReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfReadyFDD
                                                       CRITICALITY ignore TYPE RL-InformationResponseItem-RL-ReconfReadyFDD
    PRESENCE mandatory
}
RL-InformationResponseItem-RL-ReconfReadyFDD ::= SEQUENCE
   rL-TD
                                      RL-ID,
   max-UL-SIR
                                      UL-SIR
                                                                                                                          OPTIONAL,
   min-UL-SIR
                                      UL-SIR
                                                                                                                          OPTIONAL,
   maximumDLTxPower
                                      DL-Power
                                                                                                                          OPTIONAL,
   minimumDLTxPower
                                      DL-Power
                                                                                                                          OPTIONAL,
   not-Used-secondary-CCPCH-Info
                                      NULL
                                                                                                                          OPTIONAL,
   dl-CodeInformationList
                                      DL-CodeInformationList-RL-ReconfReadyFDD
                                                                                                                          OPTIONAL,
    dCHInformationResponse
                                      DCH-InformationResponseList-RL-ReconfReadyFDD
                                                                                                                          OPTIONAL,
   not-Used-dSCHsToBeAddedOrModified
                                      NULL
                                                                                                                          OPTIONAL,
   iE-Extensions
                                      ProtocolExtensionContainer { {RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs } }
                                                                                                                          OPTIONAL,
    . . .
```

}

RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-DL-PowerBalancing-UpdatedIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator 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-EDCH-FDD-InformationResponse CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse PRESENCE optional ID id-EDCH-RLSet-Id CRITICALITY ignore EXTENSION RL-Set-ID PRESENCE optional ID id-EDCH-FDD-DL-ControlChannelInformation CRITICALITY iqnore EXTENSION EDCH-FDD-DL-ControlChannelInformation PRESENCE optional ID id-F-DPCH-SlotFormat CRITICALITY ignore EXTENSION F-DPCH-SlotFormat PRESENCE optional ID id-HSDSCH-PreconfigurationInfo PRESENCE optional } CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info ID id-Non-Serving-RL-Preconfig-Info PRESENCE optional }| ID id-FTPICH-Information-Response CRITICALITY ignore EXTENSION FTPICH-Information-Response PRESENCE optional }, . . . DL-CodeInformationList-RL-ReconfReadyFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-ReconfReadyFDD }} DL-CodeInformationListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= { { ID id-FDD-DL-CodeInformation CRITICALITY ignore TYPE FDD-DL-CodeInformation PRESENCE mandatory } ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfReadyFDD} } DCH-InformationResponseList-RL-ReconfReadyFDD DCH-InformationResponseListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= { { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory RadioLinkReconfigurationReadyFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { { ID id-HSDSCH-RNTI CRITICALITY ignore EXTENSION HSDSCH-RNTI PRESENCE optional }| ID id-HSDSCH-FDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-FDD-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-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response CRITICALITY ignore EXTENSION Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response PRESENCE optional }| { ID id-Additional-HS-Cell-RL-Reconf-Response CRITICALITY ignore EXTENSION Additional-HS-Cell-RL-Reconf-Response PRESENCE optional }| { ID id-Additional-EDCH-Cell-Information-ResponseRLReconf CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-RLReconf-List PRESENCE optional }, . . . Additional-HS-Cell-RL-Reconf-Response ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-RL-Reconf-Response-ItemIEs Additional-HS-Cell-RL-Reconf-Response-ItemIEs ::=SEOUENCE{ RL-ID, hSPDSCH-RL-ID hSDSCH-RNTI HSDSCH-RNTI, hS-DSCH-FDD-Secondary-Serving-Information-Response HS-DSCH-FDD-Secondary-Serving-Information-Response, ProtocolExtensionContainer { { Additional-HS-Cell-RL-Reconf-Response-ItemIEs-ExtIEs } } OPTIONAL, iE-Extensions

Additional-HS-Cell-RL-Reconf-Response-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= - -RADIO LINK RECONFIGURATION READY TDD - -RadioLinkReconfigurationReadyTDD ::= SEQUENCE { protocolIEs ProtocolIE-Container {RadioLinkReconfigurationReadyTDD-IEs}}, protocolExtensions ProtocolExtensionContainer {{RadioLinkReconfigurationReadyTDD-Extensions}} OPTIONAL, RadioLinkReconfigurationReadyTDD-IEs RNSAP-PROTOCOL-IES ::= { { ID id-RL-InformationResponse-RL-ReconfReadyTDD CRITICALITY ignore TYPE RL-InformationResponse-RL-ReconfReadyTDD PRESENCE optional } --This RL-InformationResponse-RL-ReconfReadyTDD is for the first RL repetition in the list. --Repetitions 2 and on are defined in Multiple-RL-InformationResponse-RL-ReconfReadyTDD. { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }. . . . RL-InformationResponse-RL-ReconfReadyTDD ::= SEQUENCE { rL-ID RL-ID, max-UL-SIR UL-SIR OPTIONAL, min-UL-SIR UL-SIR OPTIONAL, maximumDLTxPower DL-Power OPTIONAL, minimumDLTxPower DL-Power OPTIONAL, secondary-CCPCH-Info-TDD Secondary-CCPCH-Info-TDD OPTIONAL, UL-CCTrCH-InformationList-RL-ReconfReadyTDD ul-CCTrCH-Information OPTIONAL. DL-CCTrCH-InformationList-RL-ReconfReadyTDD OPTIONAL, dl-CCTrCH-Information dCHInformationResponse DCH-InformationResponseList-RL-ReconfReadyTDD OPTIONAL, dSCHsToBeAddedOrModified DSCHToBeAddedOrModified-RL-ReconfReadyTDD OPTIONAL, USCHToBeAddedOrModified-RL-ReconfReadyTDD uSCHsToBeAddedOrModified OPTIONAL, iE-Extensions ProtocolExtensionContainer { {RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs } } OPTIONAL, . . . RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-UL-TimingAdvanceCtrl-LCR CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR PRESENCE optional }| --For 1.28Mcps TDD only { ID id-secondary-LCR-CCPCH-Info-TDD CRITICALITY ignore EXTENSION Secondary-LCR-CCPCH-Info-TDD PRESENCE optional } --For 1.28Mcps TDD only { ID id-secondary-CCPCH-Info-RL-ReconfReadyTDD768 CRITICALITY ignore EXTENSION Secondary-CCPCH-Info-TDD768 PRESENCE optional } { ID id-UARFCNforNt CRITICALITY ignore EXTENSION UARFCN PRESENCE optional },

```
-- Applicable to 1.28Mcps TDD only
UL-CCTrCH-InformationList-RL-ReconfReadyTDD
                                                    ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}
UL-CCTrCHInformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE UL-CCTrCHInformationListIE-RL-ReconfReadyTDD
    PRESENCE mandatory }
}
UL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-ReconfReadyTDD
UL-CCTrCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
    cCTrCH-ID
                                    CCTrCH-ID.
    ul-DPCH-AddInformation
                                    UL-DPCH-InformationAddList-RL-ReconfReadyTDD
                                                                                             OPTIONAL,
    --For 3.84Mcps TDD only
    ul-DPCH-ModifyInformation
                                    UL-DPCH-InformationModifyList-RL-ReconfReadyTDD
                                                                                                 OPTIONAL,
                                    UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD
    ul-DPCH-DeleteInformation
                                                                                                 OPTIONAL,
                                    ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD
                                                                    CRITICALITY ignore
                                                                                             EXTENSION UL-DPCH-LCR-InformationAddList-RL-
ReconfReadyTDD
                    PRESENCE optional }|
    --For 1.28Mcps TDD only
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768
                                                                    CRITICALITY ignore
                                                                                             EXTENSION UL-DPCH-InformationAddList-RL-
                        PRESENCE optional },
ReconfReadyTDD768
    --For 7.68Mcps TDD only
    . . .
UL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
                                    UL-TimeslotLCR-Information,
    uL-TimeslotLCR-Info
                                    ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationAddList-RL-ReconfReadyTDD ::= ProtocollE-Single-Container {{UL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD}}
UL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD
    PRESENCE optional
}
UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
```

```
repetitionPeriod
                                     RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset.
    rxTimingDeviationForTA
                                    RxTimingDeviationForTA
                                                                     OPTIONAL,
    uL-Timeslot-Information
                                    UL-Timeslot-Information,
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    . . .
UL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-RxTimingDeviationForTAext
                                            CRITICALITY iqnore
                                                                                                                   PRESENCE optional },
                                                                     EXTENSION RxTimingDeviationForTAext
    . . .
}
UL-DPCH-InformationAddList-RL-ReconfReadyTDD768 ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    rxTimingDeviationForTA768
                                        RxTimingDeviationForTA768
                                                                             OPTIONAL,
    uL-Timeslot-Information768
                                        UL-Timeslot-Information768,
    iE-Extensions
                                     ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfReadyTDD768-ExtIEs } } OPTIONAL,
    . . .
UL-DPCH-InformationAddItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
3
UL-DPCH-InformationModifyList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD}}
UL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD
    PRESENCE mandatory }
}
UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod
                                                                 OPTIONAL.
    repetitionLength
                                    RepetitionLength
                                                                 OPTIONAL,
    tDD-DPCHOffset
                                    TDD-DPCHOffset
                                                                 OPTIONAL,
    uL-Timeslot-InformationModifyList-RL-ReconfReadyTDD
                                                                 UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD
                                                                                                                                          OPTIONAL,
    --For 3.84Mcps TDD only
                                     ProtocolExtensionContainer { { UL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                              EXTENSION UL-TimeslotLCR-InformationModifyList-RL-
ReconfReadyTDD
                    PRESENCE optional }|
    --For 1.28Mcps TDD only
    { ID id-UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768 CRITICALITY ignore EXTENSION UL-Timeslot-InformationModifyList-RL-
                        PRESENCE optional },
ReconfReadyTDD768
    --For 7.68Mcps TDD only
. . .
}
```

UL-TimeslotLCR-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD

UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {

```
timeSlotLCRTimeSlotLCR,midambleShiftLCRMidambleShiftLCRtFCI-PresenceTFCI-PresencetDD-uL-Code-LCR-InformationTDD-UL-Code-LCR-InformationModifyList-RL-ReconfReadyTDDiE-ExtensionsProtocolExtensionContainer { {UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs } OPTIONAL,...
```

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TDD-UL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfDPCHsLCR)) OF TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD

```
TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
```

```
dPCH-ID DPCH-ID,
tDD-ChannelisationCodeLCR TDD-ChannelisationCodeLCR OPTIONAL,
iE-Extensions ProtocolExtensionContainer { TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs } OPTIONAL,
...
}
TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD CRITICALITY reject EXTENSION TDD-UL-DPCH-TimeSlotFormat-LCR
PRESENCE optional},
...
}
```

```
UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
}
```

. . .

```
UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD
```

UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {

timeSlot TimeSlot, midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL, tFCI-Presence TFCI-Presence OPTIONAL, uL-Code-Information TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD OPTIONAL, iE-Extensions ProtocolExtensionContainer { {UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL, ...

UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

1

```
TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD
```

TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
 dPCH-ID DPCH-ID,
 tDD-ChannelisationCode TDD-ChannelisationCode OPTIONAL,
 iE-Extensions ProtocolExtensionContainer { {TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,

```
. . .
}
TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3
UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768
UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType768 MidambleShiftAndBurstType768
                                                                             OPTIONAL.
    tFCI-Presence
                                    TFCI-Presence
                                                            OPTIONAL,
   uL-Code-Information768
                                    TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD768
                                                                                                 OPTIONAL.
                                    ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD768::= SEQUENCE (SIZE (1..maxNrOfDPCHs768)) OF TDD-UL-Code-InformationModifyItem-RL-
ReconfReadvTDD768
TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD768 ::= SEQUENCE {
    dPCH-ID
                                    DPCH-ID,
    tDD-ChannelisationCode768
                                    TDD-ChannelisationCode768
                                                                    OPTIONAL,
                                    ProtocolExtensionContainer { { TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD}}
UL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD
    PRESENCE mandatory }
UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF UL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD
UL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID
                                DPCH-ID,
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    . . .
}
UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
DL-CCTrCH-InformationList-RL-ReconfReadyTDD
                                                    ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}
DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE DL-CCTrCHInformationListIE-RL-ReconfReadyTDD
    PRESENCE mandatory }
DL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-ReconfReadyTDD
DL-CCTrCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
    cCTrCH-ID
                                    CCTrCH-ID.
    dl-DPCH-AddInformation
                                    DL-DPCH-InformationAddList-RL-ReconfReadyTDD
                                                                                             OPTIONAL.
    --For 3.84Mcps TDD only
    dl-DPCH-ModifyInformation
                                    DL-DPCH-InformationModifyList-RL-ReconfReadyTDD
                                                                                             OPTIONAL,
    dl-DPCH-DeleteInformation
                                    DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD
                                                                                             OPTIONAL,
                                    ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                             EXTENSION
                                                                                                           DL-DPCH-LCR-InformationAddList-RL-
ReconfReadvTDD
                    PRESENCE optional } |
    --For 1.28Mcps TDD only
    { ID id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD
                                                                    CRITICALITY ignore
                                                                                             EXTENSION DL-Power
    PRESENCE optional }|
    -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only, this is a DCH type CCTrCH power
    { ID id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD
                                                                    CRITICALITY ignore
                                                                                             EXTENSION DL-Power
    PRESENCE optional }|
    -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only, this is a DCH type CCTrCH power
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768
                                                                    CRITICALITY ignore
                                                                                             EXTENSION DL-DPCH-InformationAddList-RL-
ReconfReadyTDD768
                                        PRESENCE optional }
    --For 7.68Mcps TDD only
    { ID id-DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD
                                                                                             EXTENSION DL-DPCH-InformationDeleteList768-RL-
                                                                    CRITICALITY ignore
ReconfReadvTDD
                    PRESENCE optional},
    . . .
DL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD ::= SEQUENCE {
                                    RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    dL-TimeslotLCR-Info
                                    DL-TimeslotLCR-Information,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-LCR-InformationAddItem-RL-ReconfReadvTDD-ExtIEs} } OPTIONAL.
    . . .
DL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-DPCH-InformationAddList-RL-ReconfReadyTDD ::= ProtocollE-Single-Container {{DL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD}}
```

```
DL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD
    PRESENCE mandatory }
DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
                                    RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    dL-Timeslot-Information
                                    DL-Timeslot-Information,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs } } OPTIONAL,
    . . .
DL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationAddList-RL-ReconfReadyTDD768 ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
                                    TDD-DPCHOffset,
    tDD-DPCHOffset
    dL-Timeslot-Information768
                                    DL-Timeslot-Information768,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-InformationAddItem-RL-ReconfReadvTDD768-ExtIEs} } OPTIONAL,
    . . .
DL-DPCH-InformationAddItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-DPCH-InformationModifyList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD}}
DL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModifvListIE-RL-ReconfReadvTDD CRITICALITY ignore TYPE DL-DPCH-InformationModifvListIE-RL-ReconfReadvTDD
    PRESENCE mandatory }
}
DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD ::= SEQUENCE
    repetitionPeriod
                                    RepetitionPeriod
                                                                OPTIONAL,
    repetitionLength
                                    RepetitionLength
                                                                OPTIONAL,
    tDD-DPCHOffset
                                    TDD-DPCHOffset
                                                                OPTIONAL,
    dL-Timeslot-InformationModifyList-RL-ReconfReadyTDD
                                                                DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD
                                                                                                                                         OPTIONAL,
    --For 3.84Mcps TDD only
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs } } OPTIONAL,
    . . .
DL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                             EXTENSION DL-TimeslotLCR-InformationModifyList-RL-
                    PRESENCE optional }|
ReconfReadyTDD
    --For 1.28Mcps TDD only
    { ID id-DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768
                                                                     CRITICALITY ignore EXTENSION DL-Timeslot-InformationModifyList-RL-
ReconfReadyTDD768
                        PRESENCE optional },
```

```
--For 7.68Mcps TDD only
DL-TimeslotLCR-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF DL-TimeslotLCR-InformationModifyItem-RL-
ReconfReadyTDD
DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    timeSlotLCR
                                    TimeSlotLCR,
                                    MidambleShiftLCR
    midambleShiftLCR
                                                                OPTIONAL
    t.FCI-Presence
                                    TFCI-Presence
                                                            OPTIONAL,
    tDD-dL-Code-LCR-Information
                                    TDD-DL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD
                                                                                                   OPTIONAL,
                                    ProtocolExtensionContainer { {DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
TDD-DL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE (SIZE (1..maxNrOfDPCHsLCR)) OF TDD-DL-Code-LCR-InformationModifyItem-RL-
ReconfReadyTDD
TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-TD
                                    DPCH-ID,
    tDD-ChannelisationCodeLCR
                                    TDD-ChannelisationCodeLCR
                                                                     OPTIONAL,
                                    ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD
                                                                             CRITICALITY reject
                                                                                                          EXTENSION TDD-DL-DPCH-TimeSlotFormat-LCR
        PRESENCE optional },
    . . .
}
DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                                          EXTENSION
                                                                                                                      DL-Power
                                                                                                                                         PRESENCE
optional }|
    { ID id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                                           EXTENSION
                                                                                                                      DL-Power
                                                                                                                                         PRESENCE
optional },
    . . .
DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstTvpe
                                    MidambleShiftAndBurstTvpe
                                                                         OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                            OPTIONAL,
    dL-Code-Information
                                    TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD
                                                                                                 OPTIONAL,
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD::= SEOUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD
TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dpch-td
                                    DPCH-ID.
    tDD-ChannelisationCode
                                    TDD-ChannelisationCode
                                                                OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs } } OPTIONAL,
    . . .
TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD CRITICALITY reject EXTENSION TDD-DL-DPCH-TimeSlotFormat-LCR
PRESENCE optional },
    -- This IE shall not be used
    . . .
3
DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768::= SEOUENCE (SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType768
                                    MidambleShiftAndBurstType768
                                                                            OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                            OPTIONAL,
    dL-Code-Information768
                                    TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD768
                                                                                                  OPTIONAL,
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD768::= SEQUENCE (SIZE (1..maxNrOfDPCHs768)) OF TDD-DL-Code-InformationModifyItem-RL-
ReconfReadyTDD768
TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD768 ::= SEQUENCE {
    dPCH-ID768
                                    DPCH-ID768,
    tDD-ChannelisationCode768
                                    TDD-ChannelisationCode768
                                                                    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs } } OPTIONAL,
    . . .
TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD}
DL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD
    PRESENCE mandatory }
}
```

DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD

```
DL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID
                               DPCH-ID.
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    . . .
٦
DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs768)) OF DL-DPCH-InformationDeleteItem768-RL-ReconfReadyTDD
DL-DPCH-InformationDeleteItem768-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID768
                                   DPCH-ID768.
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD-ExtIEs } } OPTIONAL,
    . . .
DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-InformationResponseList-RL-ReconfReadyTDD
                                                            ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfReadyTDD} }
DCH-InformationResponseListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
                                       CRITICALITY ignore TYPE DCH-InformationResponse
    { ID id-DCH-InformationResponse
                                                                                                PRESENCE mandatory
                                                    ::= ProtocollE-Single-Container { {DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD} }
DSCHToBeAddedOrModified-RL-ReconfReadyTDD
DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
     ID id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD CRITICALITY iqnore TYPE DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD
    PRESENCE mandatory }
}
DSCHTOBeAddedOrModifiedList-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNoOfDSCHs)) OF DSCHTOBeAddedOrModifiedItem-RL-ReconfReadyTDD
DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dsch-ID
                           DSCH-ID,
    transportFormatManagement TransportFormatManagement,
    dSCH-FlowControlInformation DSCH-FlowControlInformation,
    bindingID
                           BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
                           ProtocolExtensionContainer { {DSCHToBeAddedOrModifiedItem-RL-ReconfReadvTDD-ExtIEs} } OPTIONAL.
    iE-Extensions
    . . .
DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
USCHToBeAddedOrModified-RL-ReconfReadyTDD
                                                   ::= ProtocollE-Single-Container { {USCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD}
}USCHTOBEAddedOrModifiedIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
```

{ ID id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD CRITICALITY ignore TYPE USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD PRESENCE mandatory } USCHTOBeAddedOrModifiedList-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNoOfUSCHs)) OF USCHTOBeAddedOrModifiedItem-RL-ReconfReadyTDD USCHTOBEAddedOrModifiedItem-RL-ReconfReadvTDD ::= SEOUENCE { uSCH-ID USCH-ID, transportFormatManagement TransportFormatManagement, BindingID OPTIONAL, bindingID transportLayerAddress TransportLayerAddress OPTIONAL, ProtocolExtensionContainer { {USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL, iE-Extensions . . . USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . RadioLinkReconfigurationReadyTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { ID id-HSDSCH-RNTI CRITICALITY ignore EXTENSION HSDSCH-RNTI PRESENCE optional } ID id-DSCH-RNTI CRITICALITY ignore EXTENSION DSCH-RNTI PRESENCE optional} ID id-HSDSCH-TDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response PRESENCE optional } ID id-MAChs-ResetIndicator CRITICALITY ignore EXTENSION MAChs-ResetIndicator PRESENCE optional ID id-Multiple-RL-InformationResponse-RL-ReconfReadyTDD CRITICALITY ignore EXTENSION Multiple-RL-InformationResponse-RL-ReconfReadyTDD PRESENCE optional } | -- This is for RL repetitions 2 and on in RL list. PRESENCE optional } ID id-E-DCH-Information-Response CRITICALITY ignore EXTENSION E-DCH-Information-Response ID id-E-DCH-768-Information-Response PRESENCE optional CRITICALITY ignore EXTENSION E-DCH-768-Information-Response ID id-E-DCH-LCR-Information-Response CRITICALITY ignore EXTENSION E-DCH-LCR-Information-Response PRESENCE optional} ID id-PowerControlGAP CRITICALITY ignore EXTENSION ControlGAP PRESENCE optional } -- Applicable to 1.28Mcps TDD only ID id-IdleIntervalInformation CRITICALITY ignore EXTENSION IdleIntervalInformation 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 } ID id-H-RNTI-For-FACH CRITICALITY ignore EXTENSION HSDSCH-RNTI PRESENCE optional} ID id-DCH-MeasurementOccasion-Information CRITICALITY reject EXTENSION DCH-MeasurementOccasion-Information PRESENCE optional } ID id-Multi-Carrier-EDCH-Response CRITICALITY ignore EXTENSION Multi-Carrier-EDCH-Information-Response PRESENCE optional} { ID id-MU-MIMO-InformationLCR CRITICALITY reject EXTENSION MU-MIMO-InformationLCR PRESENCE optional }, . . . Multiple-RL-InformationResponse-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF RL-InformationResponse-RL-ReconfReadyTDD

- -
- -- RADIO LINK RECONFIGURATION COMMIT
- -

```
RadioLinkReconfigurationCommit ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                          {{RadioLinkReconfigurationCommit-IEs}},
   protocolExtensions
                                ProtocolExtensionContainer {{RadioLinkReconfigurationCommit-Extensions}}
                                                                                                                   OPTIONAL.
   . . .
RadioLinkReconfigurationCommit-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-CFN
                             CRITICALITY ignore TYPE CFN
                                                                        PRESENCE mandatory
                                                                                               } |
     ID id-Active-Pattern-Sequence-Information
                                               CRITICALITY ignore TYPE Active-Pattern-Sequence-Information
                                                                                                              PRESENCE optional }, --FDD
onlv
   . . .
RadioLinkReconfigurationCommit-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-Fast-Reconfiguration-Mode CRITICALITY reject EXTENSION Fast-Reconfiguration-Mode PRESENCE optional }, --FDD only
   . . .
}
   - -
-- RADIO LINK RECONFIGURATION FAILURE
RadioLinkReconfigurationFailure ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                          {RadioLinkReconfigurationFailure-IEs}},
                                ProtocolExtensionContainer {{RadioLinkReconfigurationFailure-Extensions}}
   protocolExtensions
                                                                                                                    OPTIONAL,
   . . .
}
RadioLinkReconfigurationFailure-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-CauseLevel-RL-ReconfFailure
                                       CRITICALITY iqnore TYPE CauseLevel-RL-ReconfFailure PRESENCE mandatory }
    ID id-CriticalityDiagnostics
                                        CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                         PRESENCE optional },
   . . .
}
CauseLevel-RL-ReconfFailure ::= CHOICE {
   generalCause
                     GeneralCauseList-RL-ReconfFailure,
   rLSpecificCause
                     RLSpecificCauseList-RL-ReconfFailure,
   . . .
GeneralCauseList-RL-ReconfFailure ::= SEOUENCE
   cause
                                           Cause,
   iE-Extensions
                                           ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs } }
   OPTIONAL,
   . . .
GeneralCauseItem-RL-ReconfFailure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
   rL-ReconfigurationFailureList-RL-ReconfFailure
                                                     RL-ReconfigurationFailureList-RL-ReconfFailure
                                                                                                           OPTIONAL.
   iE-Extensions
                                                     ProtocolExtensionContainer { { RLSpecificCauseItem-RL-ReconfFailure-ExtIEs } }
   OPTIONAL,
   . . .
RLSpecificCauseItem-RL-ReconfFailure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-ReconfigurationFailureList-RL-ReconfFailure ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-ReconfigurationFailure-RL-
ReconfFailure-IEs } }
RL-ReconfigurationFailure-RL-ReconfFailure-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-ReconfigurationFailure-RL-ReconfFail CRITICALITY ignore TYPE RL-ReconfigurationFailure-RL-ReconfFail
                                                                                                                  PRESENCE mandatory
RL-ReconfigurationFailure-RL-ReconfFail ::= SEQUENCE {
   rL-ID
                              RL-ID,
    cause
                              Cause,
                              ProtocolExtensionContainer { {RL-ReconfigurationFailure-RL-ReconfFailure-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
RL-ReconfigurationFailure-RL-ReconfFailure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Max-UE-DTX-Cycle
                                  CRITICALITY ignore
                                                         EXTENSION Max-UE-DTX-Cycle
                                                                                             PRESENCE conditional },
    -- This IE shall be present if the Cause IE is set to "Continuous Packet Connectivity UE DTX Cycle not Available".
    . . .
}
RadioLinkReconfigurationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= ·
    . . .
       -- RADIO LINK RECONFIGURATION CANCEL
RadioLinkReconfigurationCancel ::= SEQUENCE {
                                                            {{RadioLinkReconfigurationCancel-IEs}},
   protocolIEs
                                  ProtocolIE-Container
                                  ProtocolExtensionContainer {{RadioLinkReconfigurationCancel-Extensions}}
   protocolExtensions
                                                                                                                         OPTIONAL,
    . . .
RadioLinkReconfigurationCancel-IEs RNSAP-PROTOCOL-IES ::= {
    . . .
}
RadioLinkReconfigurationCancel-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
_ _
-- RADIO LINK RECONFIGURATION REQUEST FDD
  RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
                                                            {{RadioLinkReconfigurationReguestFDD-IEs}},
   protocolIEs
                                 ProtocolIE-Container
   protocolExtensions
                                 ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}}
                                                                                                                           OPTIONAL,
   . . .
}
RadioLinkReconfigurationReguestFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-AllowedQueuingTime
                                                       CRITICALITY reject TYPE AllowedQueuingTime
                                                                                                                           PRESENCE optional
     ID id-UL-DPCH-Information-RL-ReconfRqstFDD
                                                       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-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE optional
},
UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE
   t FCS
                                 TFCS OPTIONAL,
                                  ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-UL-DPDCHIndicatorEDCH CRITICALITY reject
                                                        EXTENSION UL-DPDCHIndicatorEDCH
                                                                                          PRESENCE optional },
   . . .
}
DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
                                 TFCS OPTIONAL,
   tFCS
   tFCI-SignallingMode
                                 TFCI-SignallingMode OPTIONAL,
   limitedPowerIncrease
                                 LimitedPowerIncrease
                                                        OPTIONAL,
                                 ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfRgstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

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DCH-DeleteList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE { dCH-TD DCH-ID. ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRgstFDD-ExtIEs} } OPTIONAL, iE-Extensions . . . DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { } RadioLinkReconfigurationRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { ID id-RL-ReconfigurationReguestFDD-RL-InformationList CRITICALITY ignore EXTENSION RL-ReconfigurationReguestFDD-RL-InformationList PRESENCE optional } | ID id-DL-ReferencePowerInformation CRITICALITY ignore EXTENSION DL-ReferencePowerInformation PRESENCE optional} ID id-HSDSCH-FDD-Information PRESENCE optional CRITICALITY reject EXTENSION HSDSCH-FDD-Information 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 } CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete PRESENCE optional} ID id-HSDSCH-MACdFlows-to-Delete PRESENCE optional} ID id-HSPDSCH-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE optional } ID id-EDPCH-Information-RLReconfRequest-FDD CRITICALITY reject EXTENSION EDPCH-Information-RLReconfRequest-FDD PRESENCE optional } ID id-EDCH-FDD-Information CRITICALITY reject EXTENSION EDCH-FDD-Information ID id-EDCH-FDD-Information-To-Modify CRITICALITY reject EXTENSION EDCH-FDD-Information-To-Modify PRESENCE optional } PRESENCE optional} ID id-EDCH-MACdFlows-To-Add CRITICALITY reject EXTENSION EDCH-MACdFlows-Information ID id-EDCH-MACdFlows-To-Delete CRITICALITY reject EXTENSION EDCH-MACdFlows-To-Delete PRESENCE optional } ID id-Serving-EDCHRL-Id CRITICALITY reject EXTENSION EDCH-Serving-RL PRESENCE optional } ID id-CPC-Information CRITICALITY reject EXTENSION CPC-Information PRESENCE optional } PRESENCE optional } ID id-NoOfTargetCellHS-SCCH-Order CRITICALITY ignore EXTENSION NoOfTargetCellHS-SCCH-Order ID id-Additional-HS-Cell-Information-RL-Reconf-Req CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Reconf-Req PRESENCE optional } | ID id-UE-AggregateMaximumBitRate CRITICALITY ignore EXTENSION UE-AggregateMaximumBitRate PRESENCE optional } | ID id-Additional-EDCH-Cell-Information-RL-Reconf-Reg CRITICALITY reject EXTENSION Additional-EDCH-Cell-Information-RL-Reconf-Reg PRESENCE optional } | { ID id-UL-CLTD-Information-Reconf CRITICALITY reject EXTENSION UL-CLTD-Information-Reconf PRESENCE optional }. Additional-HS-Cell-Information-RL-Reconf-Req ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Reconf-Req-ItemIEs Additional-HS-Cell-Information-RL-Reconf-Reg-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-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-Reg-ExtIEs } } OPTIONAL, iE-Extensions . . .

Additional-HS-Cell-Information-RL-Reconf-Req-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```
. . .
3
Additional-EDCH-Cell-Information-RL-Reconf-Reg ::=SEOUENCE{
    setup-Or-ConfigurationChange-Or-Removal-Of-EDCH-On-secondary-UL-Frequency
                                                                                Setup-Or-ConfigurationChange-Or-Removal-Of-EDCH-On-secondary-
UL-Frequency,
                                  ProtocolExtensionContainer { { Additional-EDCH-Cell-Information-RL-Reconf-Reg-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
}
Additional-EDCH-Cell-Information-RL-Reconf-Reg-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RL-ReconfigurationRequestFDD-RL-InformationList ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container {
    {RL-ReconfigurationReguestFDD-RL-Information-ListItem} }
RL-ReconfigurationReguestFDD-RL-Information-ListItem RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-ReconfigurationReguestFDD-RL-Information-IEs CRITICALITY ignore TYPE RL-ReconfigurationReguestFDD-RL-Information-IEs
                                                                                                                                 PRESENCE
optional
         }
RL-ReconfigurationRequestFDD-RL-Information-IEs ::= SEQUENCE {
   rL-ID
                          RL-ID,
   rL-Specific-DCH-Info RL-Specific-DCH-Info OPTIONAL,
   iE-Extensions
                          ProtocolExtensionContainer { { RL-ReconfigurationRequestFDD-RL-Information-ExtIEs } } OPTIONAL,
    . . .
RL-ReconfigurationRequestFDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-RL-Specific-EDCH-Information
                                              CRITICALITY reject EXTENSION RL-Specific-EDCH-Information
                                                                                                                   PRESENCE optional
     ID id-EDCH-RL-Indication
                                              CRITICALITY reject EXTENSION EDCH-RL-Indication
                                                                                                                   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 }
     ID id-FTPICH-Information-Reconf
                                              CRITICALITY ignore EXTENSION FTPICH-Information-Reconf
                                                                                                                   PRESENCE optional },
    . . .
    *********
- -
-- RADIO LINK RECONFIGURATION REQUEST TDD
_ _
          RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{RadioLinkReconfigurationReguestTDD-IEs}},
                                  ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}
   protocolExtensions
                                                                                                                              OPTIONAL,
RadioLinkReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime
                                      CRITICALITY reject TYPE AllowedQueuingTime
                                                                                            PRESENCE optional
                                                                                                                   } |
```

{ 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-ReconfRgstTDD PRESENCE optional } | { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD 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 CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional ID id-DCHs-to-Add-TDD ID id-DCH-DeleteList-RL-ReconfRqstTDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstTDD PRESENCE optional }, . . . ٦ UL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocollE-Single-Container { { UL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD-IEs} } UL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD-IEs RNSAP-PROTOCOL-IES ::= { { ID id-UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD PRESENCE mandatory } UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEOUENCE { cCTrCH-ID CCTrCH-ID, tFCS TECS OPTIONAL, ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD-ExtIEs } } OPTIONAL, iE-Extensions . . . UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional }, -- Applicable to 1.28Mcps TDD only . . . } UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocollE-Single-Container { {UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs} } UL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD-IEs RNSAP-PROTOCOL-IES ::= { { ID id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD PRESENCE mandatory } } UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE { CCTrCH-ID, cCTrCH-ID ProtocolExtensionContainer { {UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD-ExtIEs} } OPTIONAL. iE-Extensions . . . ļ UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . .

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::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD InformationModifyList-RL-ReconfRgstTDD-IEs } } DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= { { ID id-DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD PRESENCE mandatory } DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE { cCTrCH-ID CCTrCH-ID, t FCS TECS OPTIONAL, ProtocolExtensionContainer { {DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD-ExtIEs} } OPTIONAL, iE-Extensions . . . DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs} } DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= { { ID id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD PRESENCE mandatory } } DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE { cCTrCH-ID CCTrCH-ID, ProtocolExtensionContainer { {DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL, iE-Extensions . . . DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRgstTDD DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE { dCH-ID DCH-ID, ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL, iE-Extensions . . . } DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . } RadioLinkReconfigurationReguestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { ID id-RL-ReconfigurationRequestTDD-RL-Information CRITICALITY ignore EXTENSION Multiple-RL-ReconfigurationRequestTDD-RL-Information PRESENCE optional } | { 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-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-CPC-InformationLCR	CRITICALITY reject	EXTENSION CPC-InformationLCR	PRESENCE optional}
{ ID id-RNTI-Allocation-Indicator	CRITICALITY ignore	EXTENSION RNTI-Allocation-Indicator	PRESENCE optional}
{ ID id-DCH-MeasurementType-Indicator	CRITICALITY reject	EXTENSION DCH-MeasurementType-Indicator	PRESENCE optional}
{ ID id-Multi-Carrier-EDCH-Reconfigure	CRITICALITY reject	EXTENSION Multi-Carrier-EDCH-Reconfigure	PRESENCE optional}
{ ID id-MU-MIMO-Indicator	CRITICALITY reject	EXTENSION MU-MIMO-Indicator	PRESENCE optional },

}

Multiple-RL-ReconfigurationRequestTDD-RL-Information ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF RL-ReconfigurationRequestTDD-RL-Information

RL-ReconfigurationRequestTDD-RL-Information ::= SEQUENCE {

```
rL-ID
                         RL-ID,
   rL-Specific-DCH-Info
                        RL-Specific-DCH-Info OPTIONAL,
                         ProtocolExtensionContainer { { RL-ReconfigurationRequestTDD-RL-Information-ExtIEs } } OPTIONAL,
   iE-Extensions
   . . .
RL-ReconfigurationRequestTDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { 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-NeedforIdleInterval
                                                  CRITICALITY ignore EXTENSION NeedforIdleInterval
                                                                                                                          PRESENCE
optional },
    . . .
     - -
-- RADIO LINK RECONFIGURATION RESPONSE FDD
RadioLinkReconfigurationResponseFDD ::= SEQUENCE {
                                                         {{RadioLinkReconfigurationResponseFDD-IEs}},
   protocolIEs
                                ProtocolIE-Container
   protocolExtensions
                                ProtocolExtensionContainer {{RadioLinkReconfigurationResponseFDD-Extensions}}
                                                                                                                        OPTIONAL,
   . . .
}
RadioLinkReconfigurationResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationResponseList-RL-ReconfRspFDD
                                                      CRITICALITY ignore TYPE RL-InformationResponseList-RL-ReconfRspFDD
   PRESENCE optional } |
   { ID id-CriticalityDiagnostics
                                       CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                        PRESENCE optional
                                                                                                             },
   . . .
}
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::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponse-RL-RL-InformationResponseList-RL-ReconfRspFDD ReconfRspFDD-IEs } } RL-InformationResponse-RL-ReconfRspFDD-IEs RNSAP-PROTOCOL-IES ::= { { ID id-RL-InformationResponseItem-RL-ReconfRspFDD CRITICALITY ignore TYPE RL-InformationResponseItem-RL-ReconfRspFDD PRESENCE mandatory } RL-InformationResponseItem-RL-ReconfRspFDD ::= SEQUENCE { rL-TD RL-ID, max-UL-SIR UL-SIR OPTIONAL, min-UL-SIR UL-SIR OPTIONAL, maximumDLTxPower DL-Power OPTIONAL. minimumDLTxPower DL-Power OPTIONAL. not-Used-secondary-CCPCH-Info OPTIONAL, NULL dCHsInformationResponseList DCH-InformationResponseList-RL-ReconfRspFDD OPTIONAL, dL-CodeInformationList-RL-ReconfResp DL-CodeInformationList-RL-ReconfRspFDD OPTIONAL, ProtocolExtensionContainer { {RL-InformationResponseItem-RL-ReconfRspFDD-ExtIEs } } OPTIONAL, iE-Extensions . . . RL-InformationResponseItem-RL-ReconfRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-DL-PowerBalancing-UpdatedIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator PRESENCE optional } ID id-EDCH-FDD-InformationResponse CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse PRESENCE optional PRESENCE optional ID id-EDCH-RLSet-Id CRITICALITY ignore EXTENSION RL-Set-ID ID id-EDCH-FDD-DL-ControlChannelInformation CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation PRESENCE optional PRESENCE optional ID id-F-DPCH-SlotFormat CRITICALITY ignore EXTENSION F-DPCH-SlotFormat 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 } ID id-FTPICH-Information-Response CRITICALITY ignore EXTENSION FTPICH-Information-Response PRESENCE optional }, . . . DCH-InformationResponseList-RL-ReconfRspFDD ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfRspFDD} } DCH-InformationResponseListIEs-RL-ReconfRspFDD RNSAP-PROTOCOL-IES ::= { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory DL-CodeInformationList-RL-ReconfRspFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-ReconfRspFDD }} DL-CodeInformationListIEs-RL-ReconfRspFDD RNSAP-PROTOCOL-IES ::= { { ID id-FDD-DL-CodeInformation CRITICALITY ignore TYPE FDD-DL-CodeInformation PRESENCE optional RadioLinkReconfigurationResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { { ID id-HSDSCH-RNTI CRITICALITY ignore EXTENSION HSDSCH-RNTI PRESENCE optional } ID id-HSDSCH-FDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response PRESENCE optional }| CRITICALITY ignore ID id-MAChs-ResetIndicator EXTENSION MAChs-ResetIndicator PRESENCE optional } { ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response CRITICALITY ignore EXTENSION Continuous-Packet-Connectivity-HS-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-Additional-EDCH-Cell-Information-ResponseRLReconf CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-RLReconf-List PRESENCE optional }, . . . \*\*\*\*\* -- RADIO LINK RECONFIGURATION RESPONSE TDD RadioLinkReconfigurationResponseTDD ::= SEQUENCE { protocolIEs ProtocolIE-Container {RadioLinkReconfigurationResponseTDD-IEs}}, protocolExtensions ProtocolExtensionContainer {{RadioLinkReconfigurationResponseTDD-Extensions}} OPTIONAL, . . . RadioLinkReconfigurationResponseTDD-IEs RNSAP-PROTOCOL-IES ::= { { ID id-RL-InformationResponse-RL-ReconfRspTDD CRITICALITY ignore TYPE RL-InformationResponse-RL-ReconfRspTDD PRESENCE optional } | --This RL-InformationResponse-RL-ReconfRspTDD is for the first RL repetition in the list. --Repetitions 2 and on are defined in Multiple-RL-InformationResponse-RL-ReconfRspTDD. CRITICALITY ignore TYPE CriticalityDiagnostics { ID id-CriticalityDiagnostics PRESENCE optional }. . . . 3 RL-InformationResponse-RL-ReconfRspTDD ::= SEQUENCE { rL-ID RL-ID, max-UL-SIR UL-SIR OPTIONAL, min-UL-STR UL-STR OPTIONAL, maximumDLTxPower DL-Power OPTIONAL, minimumDLTxPower DL-Power OPTIONAL, dCHsInformationResponseList DCH-InformationResponseList-RL-ReconfRspTDD OPTIONAL, ProtocolExtensionContainer { {RL-InformationResponse-RL-ReconfRspTDD-ExtIEs} } OPTIONAL, iE-Extensions . . . RL-InformationResponse-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-DL-CCTrCH-InformationList-RL-ReconfRspTDD CRITICALITY ignore EXTENSION DL-CCTrCH-InformationList-RL-ReconfRspTDD PRESENCE optional }| { ID id-UL-TimingAdvanceCtrl-LCR CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR PRESENCE optional }, --For 1.28Mcps TDD only . . . DL-CCTrCH-InformationList-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-ReconfRspTDD DL-CCTrCH-InformationItem-RL-ReconfRspTDD ::= SEQUENCE { cCTrCH-ID CCTrCH-ID, dl-DPCH-ModifyInformation-LCR DL-DPCH-InformationModifyList-LCR-RL-ReconfRspTDD OPTIONAL, --For 1.28Mcps TDD only cCTrCH-Maximum-DL-Power DL-Power OPTIONAL,

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--For 3.84Mcps TDD and 7.68Mcps TDD only, this is a DCH type CCTrCH power
    cCTrCH-Minimum-DL-Power
                                                DL-Power
                                                                         OPTIONAL.
    --For 3.84Mcps TDD and 7.68Mcps TDD only, this is a DCH type CCTrCH power
    iE-Extensions
                                                ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-ReconfRspTDD-ExtIEs } }
    OPTIONAL,
    . . .
DL-CCTrCH-InformationItem-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-DPCH-InformationModifyList-LCR-RL-ReconfRspTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModifyListIEs-LCR-RL-ReconfRspTDD }}
DL-DPCH-InformationModifyListIEs-LCR-RL-ReconfRspTDD RNSAP-PROTOCOL-IES ::= {
    {ID id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD CRITICALITY ignore TYPE DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD
    PRESENCE optional },
    . . .
DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD ::= SEQUENCE {
   dL-Timeslot-LCR-InformationModifyList-RL-ReconfRqstTDD
                                                                DL-Timeslot-LCR-InformationModifyList-RL-ReconfRspTDD
                                                                                                                                         OPTIONAL,
   iE-ExtensionsProtocolExtensionContainer { { DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD-ExtIEs} }
                                                                                                                         OPTIONAL,
    . . .
DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-LCR-InformationModifyList-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF DL-Timeslot-LCR-InformationModifyItem-RL-
ReconfRspTDD
DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD
                                                         ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    maxPowerLCR
                                            DL-Power
                                                        OPTIONAL,
   minPowerLCR
                                            DL-Power
                                                        OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD-ExtIEs } }
    OPTIONAL,
    . . .
DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-InformationResponseList-RL-ReconfRspTDD
                                                        ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfRspTDD} }
DCH-InformationResponseListIEs-RL-ReconfRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse
                                                                                         PRESENCE optional
}
RadioLinkReconfigurationResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-RNTI
                                                CRITICALITY ignore EXTENSION HSDSCH-RNTI
                                                                                                                         PRESENCE optional }
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ID id-HSDSCH-TDD-Information-Response
                                              CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response
                                                                                                                    PRESENCE optional }
     ID id-MAChs-ResetIndicator
                                              CRITICALITY ignore EXTENSION MAChs-ResetIndicator
                                                                                                                    PRESENCE optional }
     ID id-RL-ReconfigurationResponseTDD-RL-Information CRITICALITY ignore EXTENSION Multiple-RL-InformationResponse-RL-ReconfRspTDD
    PRESENCE optional } |
                                                                                                                    PRESENCE optional }
     ID id-E-DCH-Information-Response
                                              CRITICALITY ignore EXTENSION E-DCH-Information-Response
     ID id-E-DCH-768-Information-Response
                                                                                                                    PRESENCE optional
                                              CRITICALITY ignore EXTENSION E-DCH-768-Information-Response
                                                                                                                    PRESENCE optional }
     ID id-E-DCH-LCR-Information-Response
                                              CRITICALITY iqnore EXTENSION E-DCH-LCR-Information-Response
     ID id-PowerControlGAP
                                              CRITICALITY ignore EXTENSION ControlGAP
                                                                                                                    PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
     ID id-IdleIntervalInformation
                                              CRITICALITY ignore EXTENSION IdleIntervalInformation
                                                                                                                    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
                                                                                                                    PRESENCE optional}
                                              CRITICALITY ignore EXTENSION E-RNTI
     ID id-H-RNTI-For-FACH
                                              CRITICALITY ignore EXTENSION HSDSCH-RNTI
                                                                                                                    PRESENCE optional}
                                                                                                                    PRESENCE optional}
     ID id-DCH-MeasurementOccasion-Information CRITICALITY reject EXTENSION DCH-MeasurementOccasion-Information
     ID id-Multi-Carrier-EDCH-Response
                                                                                                                    PRESENCE optional }
                                              CRITICALITY ignore EXTENSION Multi-Carrier-EDCH-Information-Response
     ID id-MU-MIMO-InformationLCR
                                              CRITICALITY reject EXTENSION MU-MIMO-InformationLCR
                                                                                                                    PRESENCE optional },
    . . .
}
Multiple-RL-InformationResponse-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF RL-InformationResponse-RL-ReconfRspTDD
--Includes the 2<sup>nd</sup> through the max number of radio link information repetitions.
     - -
-- RADIO LINK FAILURE INDICATION
RadioLinkFailureIndication ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{RadioLinkFailureIndication-IEs}},
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkFailureIndication-Extensions}}
                                                                                                                       OPTIONAL,
    . . .
RadioLinkFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-Reporting-Object-RL-FailureInd CRITICALITY ignore TYPE Reporting-Object-RL-FailureInd
                                                                                                             PRESENCE mandatory
                                                                                                                                   },
    . . .
Reporting-Object-RL-FailureInd ::= CHOICE {
   rT.
                          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
                                          ProtocolExtensionContainer { { RLItem-RL-FailureInd-ExtIEs } } OPTIONAL,
```

```
. . .
}
RLItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
3
RL-InformationList-RL-FailureInd
                                            ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-FailureInd-IEs}
RL-Information-RL-FailureInd-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-FailureInd
                                             CRITICALITY ignore TYPE RL-Information-RL-FailureInd
                                                                                                                  PRESENCE mandatory
}
RL-Information-RL-FailureInd ::= SEQUENCE {
    rL-ID
                                RL-ID.
    cause
                                Cause,
    iE-Extensions
                                    ProtocolExtensionContainer { {RL-Information-RL-FailureInd-ExtIEs} } OPTIONAL,
    . . .
}
RL-Information-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-Set-RL-FailureInd
                             ::= SEQUENCE
   rL-Set-InformationList-RL-FailureInd
                                            RL-Set-InformationList-RL-FailureInd,
   iE-Extensions
                                            ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    . . .
}
RL-SetItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-Set-InformationList-RL-FailureInd
                                              ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-RL-
FailureInd-IEs } }
RL-Set-Information-RL-FailureInd-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-Information-RL-FailureInd
                                                    CRITICALITY ignore TYPE RL-Set-Information-RL-FailureInd
                                                                                                                          PRESENCE mandatory
}
RL-Set-Information-RL-FailureInd ::= SEQUENCE {
   rL-Set-ID
                                    RL-Set-ID,
    cause
                                    Cause,
    iE-Extensions
                                    ProtocolExtensionContainer { {RL-Set-Information-RL-FailureInd-ExtIEs} } OPTIONAL,
    . . .
}
RL-Set-Information-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RadioLinkFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

```
. . .
}
CCTrCH-RL-FailureInd ::= SEQUENCE {
                                            RL-ID.
   rL-ID
   cCTrCH-InformationList-RL-FailureInd
                                            CCTrCH-InformationList-RL-FailureInd,
                                         ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } }
   iE-Extensions
                                                                                                                OPTIONAL,
   . . .
CCTrCHItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
}
CCTrCH-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
FailureInd} }
CCTrCH-InformationItemIE-RL-FailureInd RNSAP-PROTOCOL-IES ::= {
          id-CCTrCH-InformationItem-RL-FailureInd
    { ID
                                                        CRITICALITY
                                                                       ignore
                                                                                      TYPE CCTrCH-InformationItem-RL-FailureInd
   PRESENCE
              mandatory }
CCTrCH-InformationItem-RL-FailureInd ::= SEQUENCE {
   cCTrCH-ID
                                             CCTrCH-ID,
   cause
                                             Cause,
   iE-Extensions
                                             ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-FailureInd-ExtIEs } }
                                                                                                                              OPTIONAL,
   . . .
CCTrCH-InformationItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
- -
-- RADIO LINK PREEMPTION REQUIRED INDICATION
- -
  RadioLinkPreemptionRequiredIndication ::= SEQUENCE {
                                                           {{RadioLinkPreemptionRequiredIndication-IEs}},
   protocolIEs
                                 ProtocolIE-Container
                                 ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}}
   protocolExtensions
                                                                                                                              OPTIONAL,
   . . .
}
RadioLinkPreemptionRequiredIndication-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationList-RL-PreemptRequiredInd CRITICALITY ignore TYPE RL-InformationList-RL-PreemptRequiredInd
                                                                                                                               PRESENCE
optional
         },
   . . .
RL-InformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-
PreemptRequiredInd} }
```

```
RL-InformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-PreemptRequiredInd
                                                            CRITICALITY ignore TYPE RL-InformationItem-RL-PreemptRequiredInd
                                                                                                                                        PRESENCE
mandatory }
RL-InformationItem-RL-PreemptRequiredInd::= SEQUENCE {
    rL-TD
                                RL-ID,
    iE-Extensions
                                ProtocolExtensionContainer { {RL-Information-RL-PreemptRequiredInd-ExtIEs } } OPTIONAL,
    . . .
RL-Information-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EDCH-MacdFlowSpecificInformationList-RL-PreemptRequiredInd CRITICALITY ignore EXTENSION EDCH-MacdFlowSpecificInformationList-RL-
PreemptRequiredInd PRESENCE optional },
    . . .
}
RadioLinkPreemptionRequiredIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd CRITICALITY ignore EXTENSION HSDSCHMacdFlowSpecificInformationList-RL-
PreemptRequiredInd PRESENCE optional },
    . . .
HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd ::= SEOUENCE (SIZE (1.. maxNrOfMACdFlows)) OF ProtocollE-Single-Container {
{HSDSCHMacdFlowSpecificInformationItemIEs-RL-PreemptRequiredInd}
HSDSCHMacdFlowSpecificInformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
    { ID id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd
                                                                            CRITICALITY ignore TYPE HSDSCHMacdFlowSpecificInformationItem-RL-
PreemptRequiredInd PRESENCE mandatory }
HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
    hSDSCH-MACdFlow-ID
                                            HSDSCH-MACdFlow-ID,
                                ProtocolExtensionContainer { { HSDSCHMacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
HSDSCHMacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
EDCH-MacdFlowSpecificInformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlows)) OF ProtocolIE-Single-Container { {EDCH-
MacdFlowSpecificInformationItemIEs-RL-PreemptRequiredInd} }
EDCH-MacdFlowSpecificInformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
    { ID id-EDCH-MacdFlowSpecificInformationItem-RL-PreemptRequiredInd
                                                                            CRITICALITY ignore TYPE EDCH-MacdFlowSpecificInformationItem-RL-
PreemptRequiredInd PRESENCE mandatory
EDCH-MacdFlowSpecificInformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
    eDCH-MACdFlow-ID
                                EDCH-MACdFlow-ID,
    iE-Extensions
                                ProtocolExtensionContainer { { EDCH-MacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs } } OPTIONAL,
    . . .
```

EDCH-MacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . - --- RADIO LINK RESTORE INDICATION RadioLinkRestoreIndication ::= SEQUENCE { protocolIEs ProtocolIE-Container {{RadioLinkRestoreIndication-IEs}}, ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}} protocolExtensions OPTIONAL, . . . } RadioLinkRestoreIndication-IEs RNSAP-PROTOCOL-IES ::= { { ID id-Reporting-Object-RL-RestoreInd CRITICALITY ignore TYPE Reporting-Object-RL-RestoreInd PRESENCE mandatory }, . . . } Reporting-Object-RL-RestoreInd ::= CHOICE { rL RL-RL-RestoreInd, --TDD only RL-Set-RL-RestoreInd, --FDD only rL-Set . . . , cCTrCH CCTrCH-RL-RestoreInd --TDD only RL-RL-RestoreInd ::= SEQUENCE { rL-InformationList-RL-RestoreInd RL-InformationList-RL-RestoreInd, iE-Extensions ProtocolExtensionContainer { { RLItem-RL-RestoreInd-ExtIEs } } OPTIONAL, . . . RLItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-RestoreInd-IEs} RL-InformationList-RL-RestoreInd RL-Information-RL-RestoreInd-IEs RNSAP-PROTOCOL-IES ::= { { ID id-RL-Information-RL-RestoreInd CRITICALITY ignore TYPE RL-Information-RL-RestoreInd PRESENCE mandatory RL-Information-RL-RestoreInd ::= SEQUENCE { rL-TD RL-ID, iE-Extensions ProtocolExtensionContainer { {RL-Information-RL-RestoreInd-ExtIEs} } OPTIONAL, . . . RL-Information-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=

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. . .
}
RL-Set-RL-RestoreInd ::= SEQUENCE {
    rL-Set-InformationList-RL-RestoreInd
                                            RL-Set-InformationList-RL-RestoreInd.
                                            ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
}
RL-SetItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RL-Set-InformationList-RL-RestoreInd
                                                ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-RL-
RestoreInd-IEs } }
RL-Set-Information-RL-RestoreInd-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-Information-RL-RestoreInd
                                                    CRITICALITY ignore TYPE RL-Set-Information-RL-RestoreInd
                                                                                                                         PRESENCE mandatory
}
RL-Set-Information-RL-RestoreInd ::= SEQUENCE {
   rL-Set-ID
                                    RL-Set-ID,
                                    ProtocolExtensionContainer { {RL-Set-Information-RL-RestoreInd-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
RL-Set-Information-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RadioLinkRestoreIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
CCTrCH-RL-RestoreInd ::= SEOUENCE {
                                                RL-ID,
   rL-ID
    cCTrCH-InformationList-RL-RestoreInd
                                                CCTrCH-InformationList-RL-RestoreInd,
                                            ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } }
   iE-Extensions
                                                                                                                         OPTIONAL,
    . . .
}
CCTrCHItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
CCTrCH-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
RestoreInd} }
CCTrCH-InformationItemIE-RL-RestoreInd RNSAP-PROTOCOL-IES ::= {
    { ID id-CCTrCH-InformationItem-RL-RestoreInd
                                                      CRITICALITY
                                                                             ignore
                                                                                            TYPE CCTrCH-InformationItem-RL-RestoreInd
    PRESENCE mandatory }
}
CCTrCH-InformationItem-RL-RestoreInd ::= SEQUENCE {
```

```
cCTrCH-ID
                                                  CCTrCH-ID,
   iE-Extensions
                                              ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-RestoreInd-ExtIEs } }
                                                                                                                                 OPTIONAL.
    . . .
CCTrCH-InformationItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     -- DOWNLINK POWER CONTROL REQUEST
      DL-PowerControlRequest ::= SEQUENCE {
                                                             {{DL-PowerControlRequest-IEs}},
   protocolIEs
                                  ProtocolIE-Container
                                  ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}
   protocolExtensions
                                                                                                                  OPTIONAL,
    . . .
}
DL-PowerControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-PowerAdjustmentType
                                                                                                                        PRESENCE mandatory }
                                           CRITICALITY ignore
                                                                       TYPE PowerAdjustmentType
     ID id-DLReferencePower
                                           CRITICALITY ignore
                                                                                                                        PRESENCE conditional
                                                                      TYPE DL-Power
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
     ID id-InnerLoopDLPCStatus
                                           CRITICALITY ignore
                                                                                                                        PRESENCE optional }
                                                                      TYPE InnerLoopDLPCStatus
                                                                                                                        PRESENCE conditional
    { ID id-DLReferencePowerList-DL-PC-Rgst CRITICALITY ignore
                                                                      TYPE DL-ReferencePowerInformationList-DL-PC-Rgst
    -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
    { ID id-MaxAdjustmentStep
                                           CRITICALITY ignore
                                                                      TYPE MaxAdjustmentStep
                                                                                                                        PRESENCE conditional }
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    { ID id-AdjustmentPeriod
                                           CRITICALITY iqnore
                                                                                                                        PRESENCE conditional
                                                                      TYPE AdjustmentPeriod
}|
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    { ID id-AdjustmentRatio
                                           CRITICALITY ignore
                                                                      TYPE ScaledAdjustmentRatio
                                                                                                                        PRESENCE conditional
},
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    . . .
3
DL-ReferencePowerInformationList-DL-PC-Rqst
                                                 ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {DL-
ReferencePowerInformation-DL-PC-Rqst-IEs} }
DL-ReferencePowerInformation-DL-PC-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-DL-ReferencePowerInformation-DL-PC-Rqst CRITICALITY ignore TYPE DL-ReferencePowerInformation-DL-PC-Rqst
                                                                                                                   PRESENCE mandatory
}
DL-ReferencePowerInformation-DL-PC-Rgst ::= SEQUENCE {
   rL-ID
                              RL-ID,
    dl-Reference-Power
                              DL-Power,
   iE-Extensions
                              ProtocolExtensionContainer { {DL-ReferencePowerInformation-DL-PC-Rqst-ExtIEs} } OPTIONAL,
```

```
DL-ReferencePowerInformation-DL-PC-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3
DL-PowerControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
     DOWNLINK POWER TIMESLOT CONTROL REQUEST TDD
- -
  DL-PowerTimeslotControlRequest ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                        {{DL-PowerTimeslotControlRequest-IEs}},
                               ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}
   protocolExtensions
                                                                                                               OPTIONAL,
   . . .
DL-PowerTimeslotControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-timeSlot-ISCP CRITICALITY ignore TYPE DL-TimeSlot-ISCP-Info PRESENCE optional},
   --Mandatory for 3.84Mcps TDD and 7.68 Mcps TDD only
   . . .
3
DL-PowerTimeslotControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD CRITICALITY ignore
                                                                   EXTENSION DL-TimeSlot-ISCP-LCR-Information PRESENCE optional }
   --Mandatory for 1.28Mcps TDD only
   { ID id-PrimCCPCH-RSCP-DL-PC-RqstTDD
                                             CRITICALITY ignore
                                                                   EXTENSION PrimaryCCPCH-RSCP
   PRESENCE optional }
   { ID id-PrimaryCCPCH-RSCP-Delta
                                             CRITICALITY ignore
                                                                  EXTENSION PrimaryCCPCH-RSCP-Delta
   PRESENCE optional },
   . . .
    _ _
-- PHYSICAL CHANNEL RECONFIGURATION REQUEST FDD
  PhysicalChannelReconfigurationRequestFDD ::= SEQUENCE {
                               ProtocolIE-Container
   protocolIEs
                                                       {{PhysicalChannelReconfigurationRequestFDD-IEs}},
   protocolExtensions
                               ProtocolExtensionContainer {{PhysicalChannelReconfigurationRequestFDD-Extensions}}
                                                                                                                        OPTIONAL.
   . . .
PhysicalChannelReconfigurationRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-Information-PhyChReconfRqstFDD CRITICALITY reject TYPE RL-Information-PhyChReconfRqstFDD
                                                                                                         PRESENCE mandatory
                                                                                                                             },
   . . .
}
```

```
RL-Information-PhyChReconfRgstFDD ::= SEQUENCE {
   rL-ID
                              RL-ID.
                                  DL-CodeInformationList-PhyChReconfRqstFDD,
   dl-CodeInformation
   iE-Extensions
                                  ProtocolExtensionContainer { {RL-Information-PhyChReconfRgstFDD-ExtIEs} } OPTIONAL,
    . . .
RL-Information-PhyChReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-F-DPCH-SlotFormat
                                             CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                                  PRESENCE optional }
     ID id-FTPICH-Reconfiguration-Information CRITICALITY ignore EXTENSION FTPICH-Reconfiguration-Information
                                                                                                                  PRESENCE optional },
    . . .
۱
DL-CodeInformationList-PhyChReconfRqstFDD
                                             ::= ProtocolIE-Single-Container { {DL-CodeInformationListIEs-PhyChReconfRgstFDD} }
DL-CodeInformationListIEs-PhyChReconfRgstFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-FDD-DL-CodeInformation CRITICALITY notify TYPE FDD-DL-CodeInformation PRESENCE mandatory
PhysicalChannelReconfigurationRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
      -- PHYSICAL CHANNEL RECONFIGURATION REQUEST TDD
  PhysicalChannelReconfigurationRequestTDD ::= SEQUENCE {
                                  ProtocolIE-Container
                                                            {{PhysicalChannelReconfigurationRequestTDD-IEs}},
   protocolIEs
   protocolExtensions
                                  ProtocolExtensionContainer {{PhysicalChannelReconfigurationRequestTDD-Extensions}}
                                                                                                                                  OPTIONAL.
    . . .
PhysicalChannelReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-PhyChReconfRgstTDD CRITICALITY reject TYPE RL-Information-PhyChReconfRgstTDD
                                                                                                                  PRESENCE mandatory
    . . .
}
RL-Information-PhyChReconfRqstTDD ::= SEQUENCE {
   rL-ID
                              RL-ID,
   ul-CCTrCH-Information
                              UL-CCTrCH-InformationList-PhyChReconfRqstTDD
                                                                            OPTIONAL,
   dl-CCTrCH-Information
                              DL-CCTrCH-InformationList-PhyChReconfRqstTDD
                                                                            OPTIONAL,
                              ProtocolExtensionContainer { {RL-Information-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
RL-Information-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD
                                                                    CRITICALITY reject EXTENSION HSPDSCH-Timeslot-InformationList-
PhyChReconfRqstTDD
                      PRESENCE optional } |
    --For 3.84Mcps TDD only
```

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{ ID id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD CRITICALITY reject EXTENSION HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD PRESENCE optional } --For 1.28Mcps TDD only { ID id-HSPDSCH-Timeslot-InformationList-PhyChReconfRgstTDD768 CRITICALITY reject EXTENSION HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD768 PRESENCE optional }| --For 7.68Mcps TDD only { ID id-UARFCNforNt CRITICALITY ignore EXTENSION UARFCN PRESENCE optional }, -- Applicable to 1.28Mcps TDD only ::= ProtocolIE-Single-Container { {UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} } UL-CCTrCH-InformationList-PhyChReconfRqstTDD UL-CCTrCH-InformationListIEs-PhyChReconfRgstTDD RNSAP-PROTOCOL-IES ::= { { ID id-UL-CCTrCH-InformationListIE-PhyChReconfRgstTDD CRITICALITY reject TYPE UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD PRESENCE mandatory } UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-PhyChReconfRqstTDD UL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE CCTrCH-ID, cCTrCH-ID ul-DPCH-Information UL-DPCH-InformationList-PhyChReconfRgstTDD, iE-Extensions ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-PhyChReconfRgstTDD-ExtIEs} } OPTIONAL. . . . UL-CCTrCH-InformationItem-PhyChReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . UL-DPCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationListIEs-PhyChReconfRqstTDD}} UL-DPCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= { { ID id-UL-DPCH-InformationItem-PhyChReconfRgstTDD CRITICALITY notify TYPE UL-DPCH-InformationItem-PhyChReconfRgstTDD PRESENCE mandatory } } UL-DPCH-InformationItem-PhyChReconfRgstTDD ::= SEQUENCE repetitionPeriod RepetitionPeriod OPTIONAL, repetitionLength RepetitionLength OPTIONAL, tDD-DPCHOffset TDD-DPCHOffset OPTIONAL, uL-Timeslot-InformationList-PhyChReconfRqstTDD UL-Timeslot-InformationList-PhyChReconfRqstTDD OPTIONAL, --For 3.84Mcps TDD only ProtocolExtensionContainer { { UL-DPCH-InformationItem-PhyChReconfRgstTDD-ExtIEs } } OPTIONAL, iE-Extensions . . . UL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-UL-Timeslot-LCR-InformationList-PhyChReconfRgstTDD CRITICALITY reject EXTENSION UL-TimeslotLCR-InformationList-PRESENCE optional }| PhyChReconfRqstTDD --For 1.28Mcps TDD only { ID id-UL-Timeslot-InformationList-PhyChReconfRqstTDD768 CRITICALITY reject EXTENSION UL-Timeslot-InformationList-PhyChReconfRqstTDD768 PRESENCE optional },

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--For 7.68Mcps TDD only
    . . .
UL-TimeslotLCR-InformationList-PhyChReconfRgstTDD::= SEOUENCE (SIZE (1..maxNrOfTsLCR)) OF UL-TimeslotLCR-InformationItem-PhyChReconfRgstTDD
UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR
                                    TimeSlotLCR,
    midambleShiftLCR
                                    MidambleShiftLCR
                                                            OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                        OPTIONAL,
    uL-Code-LCR-Information
                                    TDD-UL-Code-LCR-Information
                                                                     OPTIONAL,
                                    ProtocolExtensionContainer { {UL-TimeslotLCR-InformationItem-PhyChReconfRgstTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UL-TimeslotLCR-InformationItem-PhyChReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-PLCCH-Information-PhyChReconfRgstTDD
                                                        CRITICALITY reject
                                                                                                                          PRESENCE optional },
                                                                                 EXTENSION PLCCHinformation
    . . .
}
UL-Timeslot-InformationList-PhyChReconfRqstTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem-PhyChReconfRqstTDD
UL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
   midambleShiftAndBurstType
                                                MidambleShiftAndBurstType
                                                                                 OPTIONAL,
                                                         OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
    uL-Code-Information
                                TDD-UL-Code-Information
                                                            OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-Timeslot-InformationItem-PhyChReconfRgstTDD-ExtIEs} } OPTIONAL,
    . . .
UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-Timeslot-InformationList-PhyChReconfRqstTDD768::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem-PhyChReconfRqstTDD768
UL-Timeslot-InformationItem-PhyChReconfRqstTDD768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType768
                                    MidambleShiftAndBurstType768
                                                                         OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                        OPTIONAL,
    uL-Code-Information768
                                    TDD-UL-Code-Information768
                                                                     OPTIONAL,
                                    ProtocolExtensionContainer { {UL-Timeslot-InformationItem-PhyChReconfRqstTDD768-ExtIEs } OPTIONAL,
    iE-Extensions
    . . .
UL-Timeslot-InformationItem-PhyChReconfRgstTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
                                                    ::= ProtocollE-Single-Container { {DL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} }
DL-CCTrCH-InformationList-PhyChReconfRqstTDD
DL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
```

```
{ ID id-DL-CCTrCH-InformationListIE-PhyChReconfRgstTDD
                                                                CRITICALITY reject TYPE DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD
    PRESENCE mandatory
}
DL-CCTrCH-InformationListIE-PhyChReconfRgstTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-PhyChReconfRgstTDD
DL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE
    cCTrCH-ID
                                    CCTrCH-ID,
    dl-DPCH-Information
                                    DL-DPCH-InformationList-PhyChReconfRqstTDD,
                                    ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-PhyChReconfRgstTDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
DL-CCTrCH-InformationItem-PhyChReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-DPCH-InformationList-PhyChReconfRgstTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationListIEs-PhyChReconfRgstTDD}}
DL-DPCH-InformationListIEs-PhyChReconfRgstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-PhyChReconfRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-PhyChReconfRqstTDD
                                                                                                                                         PRESENCE
mandatory }
DL-DPCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE
    repetitionPeriod
                                                     RepetitionPeriod
                                                                                                                                           OPTIONAL,
    repetitionLength
                                                     RepetitionLength
                                                                                                                                           OPTIONAL,
    tDD-DPCHOffset
                                                     TDD-DPCHOffset
                                                                                                                                           OPTIONAL,
    dL-Timeslot-InformationList-PhyChReconfRgstTDD DL-Timeslot-InformationList-PhyChReconfRgstTDD
                                                                                                                                           OPTIONAL,
                                                     ProtocolExtensionContainer { {DL-DPCH-InformationItem-PhyChReconfRgstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                           OPTIONAL,
    . . .
DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-Timeslot-LCR-InformationList-PhvChReconfRgstTDD
                                                                     CRITICALITY reject
                                                                                             EXTENSION DL-TimeslotLCR-InformationList-
PhvChReconfRgstTDD
                        PRESENCE optional }
    --For 1.28Mcps TDD only
    { ID id-DL-Timeslot-InformationList-PhyChReconfRqstTDD768
                                                                     CRITICALITY reject
                                                                                             EXTENSION DL-Timeslot-InformationList-
PhyChReconfRqstTDD768
                            PRESENCE optional },
    --For 7.68Mcps TDD only
    . . .
DL-TimeslotLCR-InformationList-PhyChReconfRqstTDD::= SEQUENCE (SIZE (1..maxNrOfTsLCR)) OF DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD
DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE
    timeSlotLCR
                                    TimeSlotLCR,
    midambleShiftLCR
                                    MidambleShiftLCR
                                                             OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                         OPTIONAL,
    dL-Code-LCR-Information
                                    TDD-DL-Code-LCR-Information
                                                                     OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    . . .
```

```
DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationList-PhyChReconfRgstTDD::= SEQUENCE (SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem-PhyChReconfRgstTDD
DL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType
                                                MidambleShiftAndBurstType
                                                                                OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                        OPTIONAL,
                                TDD-DL-Code-Information
    dL-Code-Information
                                                            OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    . . .
DL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-Timeslot-InformationList-PhyChReconfRqstTDD768::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem-PhyChReconfRqstTDD768
DL-Timeslot-InformationItem-PhyChReconfRqstTDD768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType768
                                   MidambleShiftAndBurstTvpe768
                                                                         OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                        OPTIONAL,
    dL-Code-Information768
                                    TDD-DL-Code-Information768
                                                                    OPTIONAL,
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationItem-PhyChReconfRgstTDD768-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
DL-Timeslot-InformationItem-PhyChReconfRqstTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HSPDSCH-Timeslot-InformationList-PhyChReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF HSPDSCH-Timeslot-InformationItem-PhyChReconfRgstTDD
HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD::= SEQUENCE {
    timeslot
                                                    TimeSlot,
    midambleShiftAndBurstType
                                                    MidambleShiftAndBurstType,
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItem-PhyChReconfRgstTDD-ExtIEs } }
           OPTIONAL,
    . . .
HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF HSPDSCH-Timeslot-InformationItemLCR-
PhyChReconfRqstTDD
HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD::= SEQUENCE {
    timeslotLCR
                                                TimeSlotLCR,
    midambleShiftLCR
                                                MidambleShiftLCR,
```

```
ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRgstTDD-ExtIEs } }
   iE-Extensions
          OPTIONAL.
   . . .
HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HSPDSCH-Timeslot-InformationList-PhyChReconfRgstTDD768 ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF HSPDSCH-Timeslot-InformationItem-
PhyChReconfRqstTDD768
HSPDSCH-Timeslot-InformationItem-PhyChReconfRgstTDD768::= SEQUENCE {
   timeslot
                                               TimeSlot,
   midambleShiftAndBurstType768
                                               MidambleShiftAndBurstType768,
   iE-Extensions
                                               ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItem-PhyChReconfRgstTDD768-ExtIEs }
          OPTIONAL,
   . . .
HSPDSCH-Timeslot-InformationItem-PhyChReconfRgstTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
PhysicalChannelReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
  - -
  PHYSICAL CHANNEL RECONFIGURATION COMMAND
- -
- -
        *****
PhysicalChannelReconfigurationCommand ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                          {{PhysicalChannelReconfigurationCommand-IEs}},
   protocolExtensions
                                ProtocolExtensionContainer {{PhysicalChannelReconfigurationCommand-Extensions}}
                                                                                                                           OPTIONAL,
PhysicalChannelReconfigurationCommand-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-CFN
                             CRITICALITY ignore TYPE CFN
                                                                         PRESENCE mandatory
                                                                                                }
    { ID id-CriticalityDiagnostics
                                  CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                              },
                                                                                         PRESENCE optional
    . . .
}
PhysicalChannelReconfigurationCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
    - -
-- PHYSICAL CHANNEL RECONFIGURATION FAILURE
- -
```

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PhysicalChannelReconfigurationFailure ::= SEQUENCE { protocolIEs ProtocolIE-Container {{PhysicalChannelReconfigurationFailure-IEs}}, protocolExtensions ProtocolExtensionContainer {{PhysicalChannelReconfigurationFailure-Extensions}} OPTIONAL. . . . PhysicalChannelReconfigurationFailure-IEs RNSAP-PROTOCOL-IES ::= { ID id-Cause CRITICALITY iqnore TYPE Cause PRESENCE mandatory } { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }, . . . } PhysicalChannelReconfigurationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= { - --- RADIO LINK CONGESTION INDICATION RadioLinkCongestionIndication ::= SEQUENCE { protocolIEs ProtocolIE-Container {{RadioLinkCongestionIndication-IEs}}, ProtocolExtensionContainer {{RadioLinkCongestionIndication-Extensions}} protocolExtensions OPTIONAL, . . . } RadioLinkCongestionIndication-IEs RNSAP-PROTOCOL-IES ::= { ID id-CongestionCause CRITICALITY ignore TYPE CongestionCause PRESENCE optional }| { ID id-RL-InformationList-RL-CongestInd CRITICALITY ignore TYPE RL-InformationList-RL-CongestInd PRESENCE mandatory }, . . . RL-InformationList-RL-CongestInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-CongestInd } } RL-InformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= { { ID id-RL-InformationItem-RL-CongestInd CRITICALITY ignore TYPE RL-InformationItem-RL-CongestInd PRESENCE mandatory RL-InformationItem-RL-CongestInd ::= SEQUENCE { rL-ID RL-ID, dCH-Rate-Information DCH-Rate-Information-RL-CongestInd, iE-Extensions ProtocolExtensionContainer { {RL-Information-RL-CongestInd-ExtIEs } } OPTIONAL, . . . DCH-Rate-Information-RL-CongestInd ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF ProtocolIE-Single-Container { {DCH-Rate-InformationItemIEs-RL-CongestInd }

DCH-Rate-InformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {

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ID id-DCH-Rate-InformationItem-RL-CongestInd
                                                     CRITICALITY ignore TYPE DCH-Rate-InformationItem-RL-CongestInd
                                                                                                                         PRESENCE mandatory
}
DCH-Rate-InformationItem-RL-CongestInd ::= SEQUENCE {
    dCH-ID
                              DCH-ID,
   allowed-Rate-Information Allowed-Rate-Information OPTIONAL,
   iE-Extensions
                              ProtocolExtensionContainer { {DCH-Rate-InformationItem-RL-CongestInd-ExtIEs } } OPTIONAL,
    . . .
DCH-Rate-InformationItem-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-Information-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EDCH-MacdFlowSpecificInformationList-RL-CongestInd CRITICALITY ignore EXTENSION EDCH-MacdFlowSpecificInformationList-RL-CongestInd
PRESENCE optional }|
    { ID id-DCH-Indicator-For-E-DCH-HSDPA-Operation
                                                     CRITICALITY ignore EXTENSION DCH-Indicator-For-E-DCH-HSDPA-Operation
                          PRESENCE optional },
    . . .
RadioLinkCongestionIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
}
EDCH-MacdFlowSpecificInformationList-RL-CongestInd ::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlows)) OF ProtocolIE-Single-Container { { EDCH-
MacdFlowSpecificInformationItemIEs-RL-CongestInd } }
EDCH-MacdFlowSpecificInformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {
    { ID id-EDCH-MacdFlowSpecificInformationItem-RL-CongestInd
                                                                CRITICALITY ignore TYPE EDCH-MacdFlowSpecificInformationItem-RL-CongestInd
    PRESENCE mandatory }
}
EDCH-MacdFlowSpecificInformationItem-RL-CongestInd ::= SEQUENCE {
    eDCH-MACdFlow-ID
                              EDCH-MACdFlow-ID,
                              ProtocolExtensionContainer { { EDCH-MacdFlowSpecificInformation-RL-CongestInd-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
EDCH-MacdFlowSpecificInformation-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
  - -
-- UPLINK SIGNALLING TRANSFER INDICATION FDD
  UplinkSignallingTransferIndicationFDD ::= SEQUENCE
                                                            {{UplinkSignallingTransferIndicationFDD-IEs}},
   protocolIEs
                                 ProtocolIE-Container
                                  ProtocolExtensionContainer {{UplinkSignallingTransferIndicationFDD-Extensions}}
   protocolExtensions
                                                                                                                               OPTIONAL,
```

. . .

PRESENCE optional },

nkSignallingTransferIndicationFDD-IEs RNSAP-PROTOCOL-I	ES ::= {			
{ ID id-UC-ID	CRITICALITY ignore	TYPE UC-ID	PRESENCE mandatory	
}   { [ ID id-SAI	CRITICALITY ignore	TYPE SAI	PRESENCE mandatory	
{ ID id-GA-Cell	CRITICALITY ignore	TYPE GA-Cell	PRESENCE optional	
{ ID id-C-RNTI	CRITICALITY ignore	TYPE C-RNTI	PRESENCE mandatory	
{ ID id-S-RNTI	CRITICALITY ignore	TYPE S-RNTI	PRESENCE mandatory	
{ ID id-D-RNTI	CRITICALITY ignore	TYPE D-RNTI	PRESENCE optional	
{ ID id-PropagationDelay	CRITICALITY ignore	TYPE PropagationDelay	PRESENCE mandatory	
{ ID id-STTD-SupportIndicator	CRITICALITY ignore	TYPE STTD-SupportIndicator	PRESENCE mandatory }	
{    ID id-ClosedLoopMode1-SupportIndicator	CRITICALITY ignore	TYPE ClosedLoopMode1-SupportIndicator	PRESENCE mandatory }	
{ ID id-L3-Information	CRITICALITY ignore	TYPE L3-Information	PRESENCE mandatory	
}   { ID id-CN-PS-DomainIdentifier	CRITICALITY ignore	TYPE CN-PS-DomainIdentifier	PRESENCE optional	
}   { ID id-CN-CS-DomainIdentifier	CRITICALITY ignore	TYPE CN-CS-DomainIdentifier	PRESENCE optional	
{ ID id-URA-Information	CRITICALITY ignore	TYPE URA-Information	PRESENCE optional	
}, 				
UplinkSignallingTransferIndicationFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {				
	5	± ±	PRESENCE optional }	
· · ·	-	5	EXTENSION	
	<pre>{ ID id-UC-ID }   ID id-SAI   ID id-GA-Cell   ID id-C-RNTI   ID id-D-RNTI   ID id-D-RNTI   ID id-PropagationDelay   ID id-PropagationDelay   ID id-STTD-SupportIndicator { ID id-ClosedLoopModel-SupportIndicator { ID id-L3-Information } ID id-CN-PS-DomainIdentifier } ID id-CN-CS-DomainIdentifier } ID id-URA-Information }, </pre>	<pre>nkSignallingTransferIndicationFDD-IES RNSAP-PROTOCOL-IES ::= {     ID id-UC-ID CRITICALITY ignore     ID id-SAI CRITICALITY ignore     ID id-GA-Cell CRITICALITY ignore     ID id-C-RNTI CRITICALITY ignore     ID id-S-RNTI CRITICALITY ignore     ID id-S-RNTI CRITICALITY ignore     ID id-PropagationDelay CRITICALITY ignore     ID id-ClosedLoopModel-SupportIndicator CRITICALITY ignore     ID id-L3-Information CRITICALITY ignore     ID id-CN-CS-DomainIdentifier CRITICALITY ignore     ID id-CN-CS-LIADITALISAPS CRITICALITY ignore     ID id-CN-CS-LIADITANSFERICALISAPS CRITICALITY ignore     ID id-COMPONCE CRITICALISAPS CRITICALITY ignore     ID id-COMPONCE CRITICALISAPS CRITICALISAPS CRITICALISAPS     CNITICALISAPS CRITICALISAPS     CNITICALISAPS CRITICALISAPS     CNITICALISAPS CRITICALISAP</pre>	hkSignallingTransferIndicationFDD-IES ENSAP-PROTOCOL-IES ::= {     [ 1D id-UC-ID CRITICALITY ignore TYPE UC-ID     ]     [ 1D id-SAI CRITICALITY ignore TYPE SAI     [ 1D id-CA-Cell CRITICALITY ignore TYPE GA-Cell     ]     [ 1D id-S-RNTI CRITICALITY ignore TYPE C-RNTI     ]     [ 1D id-S-RNTI CRITICALITY ignore TYPE SARNTI     [ 1D id-S-RNTI CRITICALITY ignore TYPE S-RNTI     ]     [ 1D id-S-RNTI CRITICALITY ignore TYPE D-RNTI     ]     [ 1D id-S-RNTI CRITICALITY ignore TYPE PropagationDelay     ]     [ 1D id-STD-SupportIndicator CRITICALITY ignore TYPE STD-SupportIndicator     [ 1D id-CN-PS-DomainIdentifier     [ 1D id-CN-PS-DomainIdentifier     ]     [ 1D id-CN-CS-DomainIdentifier     [ 1D id-CN-CS-DomainIdentifier     ]     [ 1D id-CN-CS-DomainIdentifier     [ 1D id-CN-CS-DOMAINICACOV CRITICALITY ignore     [ 20 CN-CS-DOMAINICACOV CRITICALIT	

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rtChannelResourcesInitialisationNotKequired PRESENCE optional }| ID id-CellCapabilityContainer-FDD CRITICALITY ignore EXTENSION CellCapabilityContainer-FDD PRESENCE optional ID id-SNA-Information CRITICALITY ignore EXTENSION SNA-Information PRESENCE optional PRESENCE optional ID id-CellPortionID CRITICALITY ignore EXTENSION CellPortionID CRITICALITY ignore PRESENCE optional } ID id-Active-MBMS-Bearer-ServiceFDD EXTENSION Active-MBMS-Bearer-Service-ListFDD ID id-Inter-Frequency-Cell-List CRITICALITY ignore EXTENSION Inter-Frequency-Cell-List PRESENCE optional ID id-ExtendedPropagationDelay CRITICALITY ignore EXTENSION ExtendedPropagationDelay PRESENCE optional CRITICALITY iqnore ID id-HSDSCH-RNTI EXTENSION HSDSCH-RNTI PRESENCE optional CRITICALITY ignore EXTENSION Multiple-PLMN-List PRESENCE optional ID id-Multiple-PLMN-List ID id-E-RNTI CRITICALITY iqnore EXTENSION E-RNTI PRESENCE optional } ID id-Max-UE-DTX-Cycle CRITICALITY iqnore EXTENSION Max-UE-DTX-Cycle PRESENCE conditional }| -- This IE shall be present if the Continuous Packet Connectivity DTX-DRX Support Indicator IE in Cell Capability Container FDD IE is set to 1. CRITICALITY ignore EXTENSION CellCapabilityContainerExtension-FDD PRESENCE optional } ID id-CellCapabilityContainerExtension-FDD CRITICALITY ignore EXTENSION Secondary-Serving-Cell-List ID id-Secondary-Serving-Cell-List PRESENCE optional } PRESENCE optional }

ID id-Dual-Band-Secondary-Serving-Cell-ListCRITICALITY ignoreEXTENSION Secondary-Serving-Cell-ListID id-Extended-S-RNTICRITICALITY ignoreEXTENSION Extended-RNTI

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}					
**********	* * * * * * * * * * * * * * * * * * * *				
UPLINK SIGNALLING TRANSFER INDICATION TDD 					
************************************					
	E-Container {{Upl:	inkSignallingTransferIndicationTDD-IEs}}, inkSignallingTransferIndicationTDD-Extensions}}	OPTIONAL,		
}					
UplinkSignallingTransferIndicationTDD-IEs RNS. { ID id-UC-ID 	AP-PROTOCOL-IES ::= { CRITICALITY ignore	TYPE UC-ID	PRESENCE mandatory }		
{ ID id-SAI	CRITICALITY ignore	TYPE SAI	<pre>PRESENCE mandatory }</pre>		
{ ID id-GA-Cell	CRITICALITY ignore	TYPE GA-Cell	<pre>PRESENCE optional }</pre>		
{ ID id-C-RNTI	CRITICALITY ignore	TYPE C-RNTI	PRESENCE mandatory }		
{ ID id-S-RNTI	CRITICALITY ignore	TYPE S-RNTI	PRESENCE mandatory }		
{ ID id-D-RNTI	CRITICALITY ignore	TYPE D-RNTI	PRESENCE optional }		
{ ID id-RxTimingDeviationForTA	CRITICALITY ignore	TYPE RxTimingDeviationForTA	PRESENCE mandatory }		
{ ID id-L3-Information	CRITICALITY ignore	TYPE L3-Information	PRESENCE mandatory }		
{ ID id-CN-PS-DomainIdentifier	CRITICALITY ignore	TYPE CN-PS-DomainIdentifier	PRESENCE optional }		
{ ID id-CN-CS-DomainIdentifier	CRITICALITY ignore	TYPE CN-CS-DomainIdentifier	PRESENCE optional }		
{ ID id-URA-Information	CRITICALITY ignore	TYPE URA-Information	PRESENCE optional },		
}					
UplinkSignallingTransferIndicationTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { { ID id-GA-CellAdditionalShapes CRITICALITY ignore EXTENSION GA-CellAdditionalShapes PRESENCE optional }					
{ ID id-CommonTransportChannelResourcesIn EXTENSION CommonTransportChannelResources			PRESENCE optional }		
{ ID id-CellCapabilityContainer-TDD Applicable to 3.84Mcps TDD only	CRITICALITY ignore	EXTENSION CellCapabilityContainer-TDD	PRESENCE optional }		
{ ID id-CellCapabilityContainer-TDD-LCR Applicable to 1.28Mcps TDD only	CRITICALITY ignore	EXTENSION CellCapabilityContainer-TDD-LCR	PRESENCE optional }		
{ ID id-SNA-Information	CRITICALITY ignore	EXTENSION SNA-Information	PRESENCE optional }		
<pre>{ ID id-Active-MBMS-Bearer-ServiceTDD { ID id-CellCapabilityContainer-TDD768 Applicable to 7.68Mcps TDD only</pre>	CRITICALITY ignore CRITICALITY ignore	EXTENSION Active-MBMS-Bearer-Service-ListTDD EXTENSION CellCapabilityContainer-TDD768	PRESENCE optional }  PRESENCE optional }		
{ ID id-RxTimingDeviationForTA768	CRITICALITY ignore	EXTENSION RXTimingDeviationForTA768	PRESENCE optional }		
{    ID id-RxTimingDeviationForTAext	CRITICALITY ignore	EXTENSION RXTimingDeviationForTAext	PRESENCE optional }		

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```
ID id-Multiple-PLMN-List
                                           CRITICALITY ignore
                                                                EXTENSION Multiple-PLMN-List
                                                                                                                   PRESENCE optional }
                                                                                                                   PRESENCE optional
     ID id-HSDSCH-RNTI
                                           CRITICALITY ignore
                                                                EXTENSION HSDSCH-RNTI
     ID id-E-RNTI
                                           CRITICALITY ignore
                                                                EXTENSION E-RNTI
                                                                                                                   PRESENCE optional
     ID id-CellPortionLCRID
                                           CRITICALITY ignore
                                                                EXTENSION CellPortionLCRID
                                                                                                                   PRESENCE optional }
     ID id-CellCapabilityContainerExtension-TDD-LCR CRITICALITY ignore EXTENSION CellCapabilityContainerExtension-TDD-LCR
                                                                                                                   PRESENCE optional }
     ID id-Extended-S-RNTI
                                           CRITICALITY ignore
                                                                EXTENSION Extended-RNTI
                                                                                                                   PRESENCE optional },
   . . .
}
    -- DOWNLINK SIGNALLING TRANSFER REQUEST
- -
  *****
DownlinkSignallingTransferRequest ::= SEQUENCE {
                                                         {{DownlinkSignallingTransferRequest-IEs}},
   protocolIEs
                                ProtocolIE-Container
                                ProtocolExtensionContainer {{DownlinkSignallingTransferRequest-Extensions}}
   protocolExtensions
                                                                                                                      OPTIONAL,
   . . .
}
DownlinkSignallingTransferRequest-IEs RNSAP-PROTOCOL-IES ::= {
                                    CRITICALITY ignore TYPE C-ID
                                                                                       PRESENCE mandatory }
   { ID id-C-ID
   -- May be a GERAN cell identifier
   { ID id-D-RNTI
                                    CRITICALITY ignore TYPE D-RNTI
                                                                                       PRESENCE mandatory
                                    CRITICALITY ignore TYPE L3-Information
    ID id-L3-Information
                                                                                       PRESENCE mandatory }
   { ID id-D-RNTI-ReleaseIndication
                                    CRITICALITY ignore TYPE D-RNTI-ReleaseIndication
                                                                                        PRESENCE mandatory },
   . . .
}
DownlinkSignallingTransferRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     TD id-URA-TD
                                    CRITICALITY ignore
                                                         EXTENSION URA-ID
                                                                                                            PRESENCE optional }
     ID id-MBMS-Bearer-Service-List
                                    CRITICALITY ignore
                                                                                                            PRESENCE optional}
                                                         EXTENSION MBMS-Bearer-Service-List
     ID id-Old-URA-ID
                                    CRITICALITY ignore
                                                                                                            PRESENCE optional }
                                                         EXTENSION URA-ID
                                    CRITICALITY ignore
                                                                                                            PRESENCE conditional } |
   { ID id-SRNC-ID
                                                         EXTENSION RNC-ID
   -- This IE shall be present if the URA-ID IE or Old URA-ID IE is present.
     ID id-Extended-SRNC-ID
                                    CRITICALITY reject
                                                         EXTENSION Extended-RNC-ID
                                                                                                            PRESENCE optional }
                                                                                                            PRESENCE optional },
   { ID id-Enhanced-PCH-Capability
                                    CRITICALITY ignore
                                                         EXTENSION Enhanced-PCH-Capability
   -- FDD and 1.28Mcps TDD only
   . . .
    ***********
- -
-- RELOCATION COMMIT
- -
  ************
RelocationCommit ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                         {{RelocationCommit-IEs}},
   protocolExtensions
                                ProtocolExtensionContainer {{RelocationCommit-Extensions}}
                                                                                                      OPTIONAL,
```

```
}
RelocationCommit-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI CRITICALITY ignore TYPE D-RNTI
                                                                              PRESENCE optional
                                                                                                  } |
    { ID id-RANAP-RelocationInformation
                                         CRITICALITY ignore TYPE RANAP-RelocationInformation
                                                                                                  PRESENCE optional
                                                                                                                       },
   . . .
RelocationCommit-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
  _ _
-- PAGING REQUEST
- -
  PagingRequest ::= SEQUENCE {
                                                           {{PagingRequest-IEs}},
   protocolIEs
                                 ProtocolIE-Container
   protocolExtensions
                                 ProtocolExtensionContainer {{PagingRequest-Extensions}}
                                                                                                      OPTIONAL,
   . . .
}
PagingRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-PagingArea-PagingRqst
                                         CRITICALITY ignore TYPE PagingArea-PagingRqst
                                                                                                  PRESENCE mandatory
     ID id-SRNC-ID
                                                                                                                           -- May be a BSC-
                                         CRITICALITY ignore TYPE RNC-ID
                                                                                                  PRESENCE mandatory
Id.
     ID id-S-RNTI
                                         CRITICALITY ignore TYPE S-RNTI
                                                                                                  PRESENCE mandatory
     ID id-IMSI
                                                                                                  PRESENCE mandatory
                                         CRITICALITY ignore TYPE IMSI
     ID id-DRXCycleLengthCoefficient
                                         CRITICALITY ignore TYPE DRXCycleLengthCoefficient
                                                                                                  PRESENCE mandatory
    ID id-CNOriginatedPage-PagingRgst
                                         CRITICALITY ignore TYPE CNOriginatedPage-PagingRgst
                                                                                                  PRESENCE optional
                                                                                                                              },
   . . .
}
PagingArea-PagingRgst ::= CHOICE {
   uRA
                         URA-PagingRqst, -- May be a GRA-ID.
                         Cell-PagingRgst, -- UTRAN only
   cell
   . . .
}
URA-PagingRqst ::= SEQUENCE {
   uRA-ID
                              URA-ID,
                              ProtocolExtensionContainer { { URAItem-PagingRgst-ExtIEs } } OPTIONAL,
   iE-Extensions
   . . .
URAItem-PagingRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Cell-PagingRqst ::= SEQUENCE {
   c-ID
                              C-ID,
   iE-Extensions
                              ProtocolExtensionContainer { { CellItem-PagingRqst-ExtIEs } } OPTIONAL,
```

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```
. . .
}
CellItem-PagingRgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
}
CNOriginatedPage-PagingRgst::= SEQUENCE {
   pagingCause
                              PagingCause,
   cNDomainType
                              CNDomainType,
                              PagingRecordType,
   pagingRecordType
                              ProtocolExtensionContainer { { CNOriginatedPage-PagingRgst-ExtIEs } } OPTIONAL,
   iE-Extensions
   . . .
CNOriginatedPage-PagingRgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
PagingRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Extended-SRNC-ID
                                     CRITICALITY reject EXTENSION Extended-RNC-ID
                                                                                            PRESENCE optional }
   { ID id-Enhanced-PCH-Capability
                                     CRITICALITY ignore EXTENSION Enhanced-PCH-Capability
                                                                                            PRESENCE optional }
   -- FDD and 1.28Mcps TDD only
   { ID id-Extended-S-RNTI
                                     CRITICALITY ignore EXTENSION Extended-RNTI
                                                                                            PRESENCE optional },
   . . .
    - -
-- DEDICATED MEASUREMENT INITIATION REQUEST
DedicatedMeasurementInitiationRequest ::= SEQUENCE {
                                 ProtocolIE-Container
                                                            {{DedicatedMeasurementInitiationRequest-IEs}},
   protocolIEs
                                 ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}
   protocolExtensions
                                                                                                                               OPTIONAL.
   . . .
}
DedicatedMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                     CRITICALITY reject TYPE MeasurementID
                                                                                      PRESENCE mandatory }
     ID id-DedicatedMeasurementObjectType-DM-Rqst CRITICALITY reject TYPE DedicatedMeasurementObjectType-DM-Rqst
                                                                                                                 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 } |
                                                                                                   PRESENCE optional },
    ID id-CFN
                                         CRITICALITY reject TYPE CFN
   . . .
DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
   rL
                          RL-DM-Rqst,
   rLS
                          RL-Set-DM-Rqst,
```

```
allRL
                            All-RL-DM-Rgst,
    allRLS
                            All-RL-Set-DM-Rgst,
    . . .
RL-DM-Rgst ::= SEQUENCE {
    rL-InformationList-DM-Rqst
                                    RL-InformationList-DM-Rqst,
                                    ProtocolExtensionContainer { { RLItem-DM-Rqst-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
RLItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-InformationList-DM-Rgst
                                            ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rgst-IEs} }
RL-Information-DM-Rgst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rqst
                                            CRITICALITY reject TYPE RL-InformationItem-DM-Rgst
                                                                                                           PRESENCE mandatory
                                                                                                                                  }
3
RL-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-ID
                              RL-ID,
    dPCH-ID
                                DPCH-ID
                                            OPTIONAL,
                                    ProtocolExtensionContainer { {RL-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
}
RL-InformationItem-DM-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSSICH-Info-DM-Rqst
                                                CRITICALITY reject
                                                                                 EXTENSION HSSICH-Info-DM-Rqst
    PRESENCE optional } |
    -- TDD only
    { ID id-DPCH-ID768-DM-Rqst
                                                CRITICALITY reject
                                                                                 EXTENSION DPCH-ID768
                PRESENCE optional } |
    { ID id-HSSICH-Info-DM-Rgst-Extension
                                                CRITICALITY reject
                                                                                 EXTENSION HSSICH-Info-DM-Rgst-Extension
                                                                                                                                          PRESENCE
optional}.
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
    . . .
HSSICH-Info-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfHSSICHs)) OF HS-SICH-ID
HSSICH-Info-DM-Rqst-Extension ::= SEQUENCE (SIZE (1..maxNrOfHSSICHs)) OF HS-SICH-ID-Extension
RL-Set-DM-Rast ::= SEOUENCE {
    rL-Set-InformationList-DM-Rqst RL-Set-InformationList-DM-Rqst,
   iE-Extensions
                                    ProtocolExtensionContainer { { RL-SetItem-DM-Rgst-ExtIEs } } OPTIONAL.
    . . .
RL-SetItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

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::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-RL-Set-InformationList-DM-Rqst Rgst-IEs} } RL-Set-Information-DM-Rgst-IEs RNSAP-PROTOCOL-IES ::= { { ID id-RL-Set-InformationItem-DM-Rgst CRITICALITY reject TYPE RL-Set-InformationItem-DM-Rgst PRESENCE mandatory } RL-Set-InformationItem-DM-Rqst ::= SEQUENCE { rL-Set-ID RL-Set-ID, ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rgst-ExtIEs } } OPTIONAL, iE-Extensions . . . RL-Set-InformationItem-DM-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . All-RL-DM-Rgst ::= NULL All-RL-Set-DM-Rgst ::= NULL DedicatedMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= { { ID id-PartialReportingIndicator CRITICALITY ignore EXTENSION PartialReportingIndicator PRESENCE optional } { ID id-MeasurementRecoveryBehavior CRITICALITY ignore EXTENSION MeasurementRecoveryBehavior PRESENCE optional }| { ID id-AlternativeFormatReportingIndicator CRITICALITY ignore EXTENSION AlternativeFormatReportingIndicator PRESENCE optional }, . . . \*\*\*\*\*\*\* DEDICATED MEASUREMENT INITIATION RESPONSE - -- -\*\*\*\*\*\*\*\*\*\*\*\* DedicatedMeasurementInitiationResponse ::= SEQUENCE { ProtocolIE-Container {{DedicatedMeasurementInitiationResponse-IEs}}, protocolIEs ProtocolExtensionContainer {{DedicatedMeasurementInitiationResponse-Extensions}} protocolExtensions OPTIONAL, . . . } DedicatedMeasurementInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= { { ID id-MeasurementID CRITICALITY ignore TYPE MeasurementID PRESENCE mandatory } | { ID id-DedicatedMeasurementObjectType-DM-Rsp CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rsp PRESENCE optional } { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }, . . . } DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE { rLs RL-DM-Rsp,

```
rLS
                           RL-Set-DM-Rsp,
    allRL
                           RL-DM-Rsp,
    allRLS
                           RL-Set-DM-Rsp.
    . . .
RL-DM-Rsp ::= SEQUENCE {
    rL-InformationList-DM-Rsp
                                                    RL-InformationList-DM-Rsp,
    iE-Extensions
                                    ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } } OPTIONAL,
RLItem-DM-Rsp-ExtIEs RNSAP-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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-InformationList-DM-Rsp
                                           ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rsp-IEs} }
RL-Information-DM-Rsp-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rsp
                                           CRITICALITY ignore TYPE RL-InformationItem-DM-Rsp PRESENCE mandatory
RL-InformationItem-DM-Rsp ::= SEQUENCE {
    rL-ID
                               RL-ID,
    dPCH-ID
                               DPCH-ID
                                                    OPTIONAL,
    dedicatedMeasurementValue DedicatedMeasurementValue,
    CFN
                               CFN
                                                   OPTIONAL,
                               ProtocolExtensionContainer { {RL-InformationItem-DM-Rsp-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
RL-InformationItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-HSSICH-Info-DM
                               CRITICALITY reject
                                                                                           PRESENCE optional } |
                                                               EXTENSION HS-SICH-ID
    -- TDD only
    { ID id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp CRITICALITY ignore EXTENSION Multiple-DedicatedMeasurementValueList-TDD-DM-Rsp
    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.
    { ID id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp
                                                                       CRITICALITY ignore EXTENSION Multiple-DedicatedMeasurementValueList-LCR-
TDD-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.
    { ID id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp
                                                                        CRITICALITY ignore EXTENSION Multiple-HSSICHMeasurementValueList-TDD-DM-
Rsp PRESENCE optional }|
```

-- TDD only. This list of HS-SICH measurement values is used for the 2<sup>nd</sup> and beyond measurements of a RL when multiple HS-SICH measurement values need to be reported. { ID id-multiple-DedicatedMeasurementValueList-TDD768-DM-Rsp CRITICALITY ignore EXTENSION Multiple-DedicatedMeasurementValueList-TDD768-DM-Rsp PRESENCE optional } | -- Applicable to 7.68Mcps TDD only. This list of dedicated measurement values is used for the 2<sup>nd</sup> and beyond measurements of a RL when multiple dedicated measurement values need to be reported. { ID id-DPCH-ID768-DM-Rsp CRITICALITY ignore EXTENSION DPCH-ID768 PRESENCE optional} { ID id-HS-SICH-ID-Extension CRITICALITY ignore EXTENSION HS-SICH-ID-Extension PRESENCE optional }, -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31 . . . ι RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-Rsp-IEs} } RL-Set-Information-DM-Rsp-IEs RNSAP-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, cFN CFN OPTIONAL, ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rspns-ExtIEs } } iE-Extensions OPTIONAL, . . . 3 RL-Set-InformationItem-DM-Rspns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . DedicatedMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= { id-MeasurementRecoverySupportIndicator { ID CRITICALITY iqnore EXTENSION MeasurementRecoverySupportIndicator PRESENCE optional }, . . . } Multiple-DedicatedMeasurementValueList-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfDPCHsPerRL-1)) OF Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp ::= SEQUENCE { dPCH-TD DPCH-ID, dedicatedMeasurementValue DedicatedMeasurementValue, ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp-ExtIEs } } iE-Extensions OPTIONAL, . . . Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . }

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Multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfDPCHsLCRPerRL-1)) OF Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp

```
Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp ::= SEQUENCE {
   dPCH-ID
                                     DPCH-ID,
   dedicatedMeasurementValue
                                     DedicatedMeasurementValue,
   iE-Extensions
                                     ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp-ExtIEs } }
   OPTIONAL,
   . . .
Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Multiple-HSSICHMeasurementValueList-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfHSSICHs-1)) OF Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp
Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp ::= SEQUENCE {
   hsSICH-ID
                                     HS-SICH-ID.
   dedicatedMeasurementValue
                                     DedicatedMeasurementValue,
                                     ProtocolExtensionContainer { { Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp-ExtIEs} }
   iE-Extensions
                                                                                                                               OPTIONAL,
   . . .
Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-HS-SICH-ID-Extension
                                         CRITICALITY ignore
                                                                EXTENSION HS-SICH-ID-Extension
                                                                                                          PRESENCE optional },
   -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
   . . .
}
Multiple-DedicatedMeasurementValueList-TDD768-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfDPCHs768PerRL-1)) OF Multiple-DedicatedMeasurementValueItem-
TDD768-DM-Rsp
Multiple-DedicatedMeasurementValueItem-TDD768-DM-Rsp ::= SEQUENCE {
   dPCH-ID768
                                     DPCH-ID768,
   dedicatedMeasurementValue
                                     DedicatedMeasurementValue,
                                     ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-TDD768-DM-Rsp-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
Multiple-DedicatedMeasurementValueItem-TDD768-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  - -
-- DEDICATED MEASUREMENT INITIATION FAILURE
```

```
DedicatedMeasurementInitiationFailure ::= SEQUENCE {
    protocolIEs
                                    ProtocolIE-Container
                                                                {{DedicatedMeasurementInitiationFailure-IEs}},
   protocolExtensions
                                    ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}}
                                                                                                                                        OPTIONAL.
    . . .
3
DedicatedMeasurementInitiationFailure-IEs RNSAP-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
                                                                                                                         },
    . . .
DedicatedMeasurementInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-DedicatedMeasurementObjectType-DM-Fail CRITICALITY ignore EXTENSION DedicatedMeasurementObjectType-DM-Fail
                                                                                                                                 PRESENCE optional
    },
    . . .
DedicatedMeasurementObjectType-DM-Fail ::= CHOICE {
    rL
                            RL-DM-Fail,
                            RL-Set-DM-Fail,
   rLS
    allRL
                           RL-DM-Fail,
    allRLS
                            RL-Set-DM-Fail,
    . . .
RL-DM-Fail ::= SEQUENCE {
    rL-unsuccessful-InformationRespList-DM-Fail
                                                    RL-Unsuccessful-InformationRespList-DM-Fail,
    rL-successful-InformationRespList-DM-Fail
                                                    RL-Successful-InformationRespList-DM-Fail
                                                                                                          OPTIONAL,
                                    ProtocolExtensionContainer { { RLItem-DM-Fail-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
RLItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RL-Set-DM-Fail ::= SEQUENCE {
    rL-Set-unsuccessful-InformationRespList-DM-Fail RL-Set-Unsuccessful-InformationRespList-DM-Fail,
    rL-Set-successful-InformationRespList-DM-Fail RL-Set-Successful-InformationRespList-DM-Fail
                                                                                                                  OPTIONAL,
                                    ProtocolExtensionContainer { { RL-SetItem-DM-Fail-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
RL-SetItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RL-Unsuccessful-InformationRespList-DM-Fail
                                                 :== SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Unsuccessful-
InformationResp-DM-Fail-IEs } }
RL-Unsuccessful-InformationResp-DM-Fail-IEs RNSAP-PROTOCOL-IES ::= {
```

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```

```
{ ID id-RL-Unsuccessful-InformationItem-DM-Fail
                                                        CRITICALITY ignore TYPE RL-Unsuccessful-InformationItem-DM-Fail
                                                                                                                                         PRESENCE
mandatory }
RL-Unsuccessful-InformationItem-DM-Fail ::= SEQUENCE {
    rL-TD
                                RL-ID.
    individualcause
                                Cause OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { {RL-Unsuccessful-InformationItem-DM-Fail-ExtIEs} } OPTIONAL.
    . . .
RL-Unsuccessful-InformationItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-Successful-InformationRespList-DM-Fail
                                                    ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-Successful-
InformationResp-DM-Fail-IEs } 
RL-Successful-InformationResp-DM-Fail-IES RNSAP-PROTOCOL-IES ::= {
      ID id-RL-Successful-InformationItem-DM-Fail
                                                        CRITICALITY ignore TYPE RL-Successful-InformationItem-DM-Fail
                                                                                                                                 PRESENCE mandatory
}
RL-Successful-InformationItem-DM-Fail ::= SEOUENCE {
    rL-ID
                                RL-ID,
    dPCH-ID
                                DPCH-ID
                                                    OPTIONAL.
    dedicatedMeasurementValue
                                DedicatedMeasurementValue,
    CFN
                                CFN
                                                    OPTIONAL,
                                ProtocolExtensionContainer { {RL-Successful-InformationItem-DM-Fail-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
RL-Successful-InformationItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                                                                                  PRESENCE optional}
    {ID id-HSSICH-Info-DM
                                            CRITICALITY reject
                                                                             EXTENSION HS-SICH-ID
    -- TDD only
   { ID id-HS-SICH-ID-Extension
                                            CRITICALITY ignore
                                                                             EXTENSION HS-SICH-ID-Extension
                                                                                                                                 PRESENCE optional },
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
    . . .
RL-Set-Unsuccessful-InformationRespList-DM-Fail
                                                            ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocollE-Single-Container { {RL-Set-
Unsuccessful-InformationResp-DM-Fail-IEs } 
RL-Set-Unsuccessful-InformationResp-DM-Fail-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-Unsuccessful-InformationItem-DM-Fail
                                                            CRITICALITY ignore TYPE RL-Set-Unsuccessful-InformationItem-DM-Fail
    PRESENCE mandatory }
}
RL-Set-Unsuccessful-InformationItem-DM-Fail ::= SEQUENCE {
    rL-Set-ID
                                    RL-Set-ID,
                                                OPTIONAL,
    individualcause
                                    Cause
   iE-Extensions
                                    ProtocolExtensionContainer { {RL-Set-Unsuccessful-InformationItem-DM-Failns-ExtIEs } } OPTIONAL,
    . . .
```

```
RL-Set-Unsuccessful-InformationItem-DM-Failns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-Set-Successful-InformationRespList-DM-Fail
                                                         ::= SEQUENCE (SIZE (1..maxNrOfRLSets-1)) OF ProtocolIE-Single-Container { {RL-Set-
Successful-InformationResp-DM-Fail-IEs} }
RL-Set-Successful-InformationResp-DM-Fail-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-Set-Successful-InformationItem-DM-Fail
                                                        CRITICALITY ignore TYPE RL-Set-Successful-InformationItem-DM-Fail
                                                                                                                                 PRESENCE
mandatory
           }
}
RL-Set-Successful-InformationItem-DM-Fail ::= SEQUENCE {
   rL-Set-ID
                                  RL-Set-ID.
   dedicatedMeasurementValue
                                  DedicatedMeasurementValue,
   cFN
                                  CFN
                                                     OPTIONAL,
   iE-Extensions
                                  ProtocolExtensionContainer { {RL-Set-Successful-InformationItem-DM-Failns-ExtIEs} } OPTIONAL,
    . . .
}
RL-Set-Successful-InformationItem-DM-Failns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
  _ _
-- DEDICATED MEASUREMENT REPORT
_ _
          *****
DedicatedMeasurementReport ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                            {{DedicatedMeasurementReport-IEs}},
                                  ProtocolExtensionContainer {{DedicatedMeasurementReport-Extensions}}
                                                                                                                     OPTIONAL,
   protocolExtensions
    . . .
DedicatedMeasurementReport-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                      CRITICALITY ignore TYPE MeasurementID
                                                                                       PRESENCE mandatory }
    { ID id-DedicatedMeasurementObjectType-DM-Rprt CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rprt
                                                                                                                  PRESENCE mandatory
                                                                                                                                        },
    . . .
}
DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
   rLs
                          RL-DM-Rprt,
   rLS
                          RL-Set-DM-Rprt,
   allRL
                          RL-DM-Rprt,
   allRLS
                          RL-Set-DM-Rprt,
    . . .
RL-DM-Rprt ::= SEQUENCE {
   rL-InformationList-DM-Rprt
                                  RL-InformationList-DM-Rprt,
   iE-Extensions
                                  ProtocolExtensionContainer { { RLItem-DM-Rprt-ExtIEs } } OPTIONAL,
```

```
. . .
}
RLItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RL-Set-DM-Rprt ::= SEQUENCE {
    rL-Set-InformationList-DM-Rprt RL-Set-InformationList-DM-Rprt,
                                    ProtocolExtensionContainer { { RL-SetItem-DM-Rprt-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
RL-SetItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
                                            ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rprt-IEs} }
RL-InformationList-DM-Rprt
RL-Information-DM-Rprt-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rprt
                                            CRITICALITY ignore TYPE RL-InformationItem-DM-Rprt
                                                                                                          PRESENCE mandatory
                                                                                                                                 }
RL-InformationItem-DM-Rprt ::= SEOUENCE {
    rL-ID
                                RL-ID,
    dPCH-ID
                                DPCH-ID
                                                    OPTIONAL.
    dedicatedMeasurementValueInformation
                                            DedicatedMeasurementValueInformation,
                                    ProtocolExtensionContainer { {RL-InformationItem-DM-Rprt-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
RL-InformationItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-HSSICH-Info-DM-Rprt
                                    CRITICALITY iqnore
                                                                     EXTENSION HS-SICH-ID
                                                                                                 PRESENCE optional } |
    -- TDD only
    { ID id-DPCH-ID768-DM-Rprt
                                        CRITICALITY ignore
                                                                         EXTENSION DPCH-ID768
                                                                                                                     PRESENCE optional } |
                                        CRITICALITY ignore
    { ID id-HS-SICH-ID-Extension
                                                                         EXTENSION HS-SICH-ID-Extension
                                                                                                                                         PRESENCE
optional}.
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
    . . .
}
RL-Set-InformationList-DM-Rprt
                                              ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-
Rprt-IEs } }
RL-Set-Information-DM-Rprt-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rprt
                                             CRITICALITY ignore TYPE RL-Set-InformationItem-DM-Rprt
                                                                                                                         PRESENCE mandatory
}
RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
    rL-Set-ID
                                    RL-Set-ID,
                                          DedicatedMeasurementValueInformation,
    dedicatedMeasurementValueInformation
   iE-Extensions
                                    ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rprt-ExtIEs } } OPTIONAL,
    . . .
```

```
RL-Set-InformationItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
DedicatedMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
        id-MeasurementRecoveryReportingIndicator
   { ID
                                                   CRITICALITY iqnore
                                                                        EXTENSION
                                                                                  MeasurementRecoveryReportingIndicator
   PRESENCE optional },
   . . .
}
  - -
-- DEDICATED MEASUREMENT TERMINATION REQUEST
- -
        DedicatedMeasurementTerminationReguest ::= SEQUENCE {
                                                       {{DedicatedMeasurementTerminationReguest-IEs}},
   protocolIEs
                              ProtocolIE-Container
                              ProtocolExtensionContainer {{DedicatedMeasurementTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                                    OPTIONAL,
   . . .
DedicatedMeasurementTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-MeasurementID
                        CRITICALITY ignore TYPE MeasurementID
                                                                               PRESENCE mandatory },
   . . .
}
DedicatedMeasurementTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
    - -
-- DEDICATED MEASUREMENT FAILURE INDICATION
- -
       DedicatedMeasurementFailureIndication ::= SEQUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                       {{DedicatedMeasurementFailureIndication-IEs}},
                              ProtocolExtensionContainer {{DedicatedMeasurementFailureIndication-Extensions}}
   protocolExtensions
                                                                                                                    OPTIONAL,
   . . .
DedicatedMeasurementFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID CRITICALITY ignore TYPE MeasurementID
                                                                        PRESENCE mandatory }
   { ID id-Cause
                           CRITICALITY ignore TYPE Cause
                                                                        PRESENCE mandatory },
   . . .
}
DedicatedMeasurementFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-DedicatedMeasurementObjectType-DM-Fail-Ind CRITICALITY ignore EXTENSION DedicatedMeasurementObjectType-DM-Fail-Ind
                                                                                                                     PRESENCE
optional
        },
   . . .
```

```
}
DedicatedMeasurementObjectType-DM-Fail-Ind ::= CHOICE {
    rL
                           RL-DM-Fail-Ind.
    rLS
                            RL-Set-DM-Fail-Ind.
                           RL-DM-Fail-Ind,
    allRL
                           RL-Set-DM-Fail-Ind,
    allRLS
    . . .
}
RL-DM-Fail-Ind ::= SEQUENCE
    rL-unsuccessful-InformationRespList-DM-Fail-Ind
                                                        RL-Unsuccessful-InformationRespList-DM-Fail-Ind,
                                                        ProtocolExtensionContainer { { RLItem-DM-Fail-Ind-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
}
RLItem-DM-Fail-Ind-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RL-Set-DM-Fail-Ind ::= SEQUENCE {
   rL-Set-unsuccessful-InformationRespList-DM-Fail-Ind
                                                            RL-Set-Unsuccessful-InformationRespList-DM-Fail-Ind,
                                                            ProtocolExtensionContainer { { RL-SetItem-DM-Fail-Ind-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
RL-SetItem-DM-Fail-Ind-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
                                                  ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Unsuccessful-
RL-Unsuccessful-InformationRespList-DM-Fail-Ind
InformationResp-DM-Fail-Ind-IEs } }
RL-Unsuccessful-InformationResp-DM-Fail-Ind-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Unsuccessful-InformationItem-DM-Fail-Ind CRITICALITY ignore TYPE RL-Unsuccessful-InformationItem-DM-Fail-Ind
    PRESENCE mandatory
}
RL-Unsuccessful-InformationItem-DM-Fail-Ind ::= SEQUENCE {
    rL-ID
                                RL-ID,
    individualcause
                                Cause
                                            OPTIONAL,
                                ProtocolExtensionContainer { {RL-Unsuccessful-InformationItem-DM-Fail-Ind-ExtIEs } OPTIONAL,
    iE-Extensions
    . . .
}
RL-Unsuccessful-InformationItem-DM-Fail-Ind-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RL-Set-Unsuccessful-InformationRespList-DM-Fail-Ind
                                                               :== SEQUENCE (SIZE (1...maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-
Unsuccessful-InformationResp-DM-Fail-Ind-IEs }
```

```
RL-Set-Unsuccessful-InformationResp-DM-Fail-Ind-IEs RNSAP-PROTOCOL-IES ::= {
```

```
{ ID id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind
                                                         CRITICALITY ignore TYPE RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind
   PRESENCE mandatory
}
RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind ::= SEQUENCE {
   rL-Set-ID
                                RL-Set-ID,
   individualcause
                                Cause
                                          OPTIONAL,
   iE-Extensions
                                ProtocolExtensionContainer { {RL-Set-Unsuccessful-InformationItem-DM-Fail-Indns-ExtIEs } } OPTIONAL,
   . . .
RL-Set-Unsuccessful-InformationItem-DM-Fail-Indns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
        - -
  COMMON TRANSPORT CHANNEL RESOURCES RELEASE REQUEST
CommonTransportChannelResourcesReleaseRequest ::= SEQUENCE {
                                                        {{CommonTransportChannelResourcesReleaseRequest-IEs}},
   protocolIEs
                               ProtocolIE-Container
   protocolExtensions
                                ProtocolExtensionContainer {{CommonTransportChannelResourcesReleaseRequest-Extensions}}
OPTIONAL,
   . . .
3
CommonTransportChannelResourcesReleaseRequest-IEs RNSAP-PROTOCOL-IES ::= {
                               CRITICALITY ignore TYPE D-RNTI
   { ID id-D-RNTI
                                                                           PRESENCE mandatory },
   . . .
CommonTransportChannelResourcesReleaseRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    _ _
  COMMON TRANSPORT CHANNEL RESOURCES REQUEST
  CommonTransportChannelResourcesRequest ::= SEQUENCE {
                                                        {{CommonTransportChannelResourcesRequest-IEs}},
   protocolIEs
                                ProtocolIE-Container
                                ProtocolExtensionContainer {{CommonTransportChannelResourcesRequest-Extensions}}
   protocolExtensions
                                                                                                                        OPTIONAL,
   . . .
}
CommonTransportChannelResourcesRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI
                                          CRITICALITY reject TYPE D-RNTI
                                                                                                       PRESENCE mandatory } |
     ID id-C-ID
                                          CRITICALITY reject TYPE C-ID
                                                                                                       PRESENCE optional } |
     ID id-TransportBearerRequestIndicator
                                          CRITICALITY reject TYPE TransportBearerRequestIndicator
                                                                                                       PRESENCE mandatory }
     ID id-TransportBearerID
                                                                                                       PRESENCE mandatory },
                                          CRITICALITY reject TYPE TransportBearerID
```

```
. . .
CommonTransportChannelResourcesRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Permanent-NAS-UE-Identity
                                             CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity
                                                                                                              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-MBMS-Bearer-Service-List
                                             CRITICALITY notify EXTENSION MBMS-Bearer-Service-List
                                                                                                              PRESENCE optional
     ID id-TnlOos
                                             CRITICALITY ignore EXTENSION ThlQos
                                                                                                              PRESENCE optional }
    ID id-Enhanced-FACH-Support-Indicator
                                                                                                              PRESENCE optional }
                                             CRITICALITY ignore EXTENSION Enhanced-FACH-Support-Indicator
    -- FDD and 1.28Mcps TDD only
    { ID id-Common-EDCH-Support-Indicator
                                             CRITICALITY ignore EXTENSION Common-EDCH-Support-Indicator
                                                                                                              PRESENCE optional }|
    -- FDD only
    { ID id-HSDSCH-Physical-Layer-Category
                                             CRITICALITY ignore EXTENSION HSDSCH-Physical-Layer-Category
                                                                                                              PRESENCE optional }|
     ID id-UE-with-enhanced-HS-SCCH-support-indicator CRITICALITY ignore EXTENSION NULL
                                                                                                              PRESENCE optional },
    COMMON TRANSPORT CHANNEL RESOURCES RESPONSE FDD
- -
  CommonTransportChannelResourcesResponseFDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                            {{CommonTransportChannelResourcesResponseFDD-IEs}},
                                  ProtocolExtensionContainer {{CommonTransportChannelResourcesResponseFDD-Extensions}}
   protocolExtensions
   OPTIONAL,
    . . .
CommonTransportChannelResourcesResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-S-RNTI
                                  CRITICALITY ignore TYPE S-RNTI
                                                                                PRESENCE mandatory
     ID id-C-RNTI
                                  CRITICALITY ignore TYPE C-RNTI
                                                                                PRESENCE optional
     ID id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD CRITICALITY ignore TYPE FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD
    PRESENCE mandatory } |
     ID id-TransportLayerAddress
                                         CRITICALITY ignore TYPE TransportLayerAddress
                                                                                                                  } |
                                                                                             PRESENCE optional
     ID id-BindingID
                                  CRITICALITY ignore TYPE BindingID
                                                                                    PRESENCE optional
                                                                                                           }
    ID id-CriticalityDiagnostics
                                         CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                             PRESENCE optional
                                                                                                                  },
    . . .
FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD ::= SEOUENCE {
    fACH-FlowControlInformation
                                  FACH-FlowControlInformation-CTCH-ResourceRspFDD,
-- If the Enhanced FACH Information Response IE is included in the message, the FACH Flow Control Information IE shall be ignored.
                                  ProtocolExtensionContainer { {FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD-ExtIEs } OPTIONAL,
   iE-Extensions
}
FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

FACH-FlowControlInformation-CTCH-ResourceRspFDD ::= ProtocolIE-Single-Container {{ FACH-FlowControlInformationIEs-CTCH-ResourceRspFDD }} FACH-FlowControlInformationIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= { ID id-FACH-FlowControlInformation CRITICALITY ignore TYPE FACH-FlowControlInformation PRESENCE mandatory } CommonTransportChannelResourcesResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { TD id-C-TD CRITICALITY ignore EXTENSION C-ID PRESENCE mandatory } | ID id-Active-MBMS-Bearer-ServiceFDD CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListFDD PRESENCE optional} ID id-Enhanced-FACH-Information-ResponseFDD CRITICALITY ignore EXTENSION Enhanced-FACH-Information-ResponseFDD PRESENCE optional } ID id-Common-EDCH-MAC-d-Flow-Specific-InformationFDD CRITICALITY ignore EXTENSION Common-EDCH-MAC-d-Flow-Specific-InformationFDD PRESENCE optional } | ID id-E-RNTI CRITICALITY ignore EXTENSION E-RNTI PRESENCE optional } | ID id-Extended-S-RNTI CRITICALITY ignore EXTENSION Extended-RNTI PRESENCE optional }, \_ \_ COMMON TRANSPORT CHANNEL RESOURCES RESPONSE TDD \*\*\*\*\*\*\*\*\*\*\*\*\* CommonTransportChannelResourcesResponseTDD ::= SEQUENCE { protocolIEs ProtocolIE-Container {{CommonTransportChannelResourcesResponseTDD-IEs}}, protocolExtensions ProtocolExtensionContainer {{CommonTransportChannelResourcesResponseTDD-Extensions}} OPTIONAL, . . . CommonTransportChannelResourcesResponseTDD-IEs RNSAP-PROTOCOL-IES ::= { ID id-S-RNTI CRITICALITY ignore TYPE S-RNTI PRESENCE mandatory ID id-C-RNTI CRITICALITY ignore TYPE C-RNTI PRESENCE optional ID id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD PRESENCE mandatory } | ID id-TransportLayerAddress CRITICALITY ignore TYPE TransportLayerAddress PRESENCE optional } | ID id-BindingID CRITICALITY ignore TYPE BindingID PRESENCE optional ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }, . . . FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD ::= SEQUENCE { FACH-FlowControlInformation-CTCH-ResourceRspTDD, fACH-FlowControlInformation iE-Extensions ProtocolExtensionContainer { {FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL. . . . FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= . . . }

FACH-FlowControlInformation-CTCH-ResourceRspTDD ::= ProtocolIE-Single-Container {{ FACH-FlowControlInformationIEs-CTCH-ResourceRspTDD }}

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FACH-FlowControlInformationIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= { { ID id-FACH-FlowControlInformation CRITICALITY ignore TYPE FACH-FlowControlInformation PRESENCE mandatory CommonTransportChannelResourcesResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= { ID id-C-ID PRESENCE mandatory } | CRITICALITY ignore EXTENSION C-ID ID id-Active-MBMS-Bearer-ServiceTDD CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListTDD PRESENCE optional } ID id-Enhanced-FACH-Information-ResponseLCR CRITICALITY ignore EXTENSION Enhanced-FACH-Information-ResponseLCR PRESENCE optional } ID id-Common-EDCH-MAC-d-Flow-Specific-InformationLCR CRITICALITY ignore EXTENSION Common-EDCH-MAC-d-Flow-Specific-InformationLCR PRESENCE optional } { ID id-Extended-S-RNTI PRESENCE optional }, CRITICALITY ignore EXTENSION Extended-RNTI COMMON TRANSPORT CHANNEL RESOURCES FAILURE - -CommonTransportChannelResourcesFailure ::= SEQUENCE { protocolIEs {CommonTransportChannelResourcesFailure-IEs}}, ProtocolIE-Container ProtocolExtensionContainer {{CommonTransportChannelResourcesFailure-Extensions}} protocolExtensions OPTIONAL. . . . CommonTransportChannelResourcesFailure-IEs RNSAP-PROTOCOL-IES ::= { ID id-S-RNTI CRITICALITY ignore TYPE S-RNTI PRESENCE mandatory ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory } ID id-CriticalityDiagnostics PRESENCE optional }, CRITICALITY ignore TYPE CriticalityDiagnostics . . . CommonTransportChannelResourcesFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= { ID id-Extended-S-RNTI CRITICALITY ignore EXTENSION Extended-RNTI PRESENCE optional }, . . . COMPRESSED MODE COMMAND - -CompressedModeCommand ::= SEOUENCE { protocolIEs ProtocolIE-Container {{CompressedModeCommand-IEs}}, protocolExtensions ProtocolExtensionContainer {{CompressedModeCommand-Extensions}} OPTIONAL, . . . CompressedModeCommand-IEs RNSAP-PROTOCOL-IES ::= { { ID id-Active-Pattern-Sequence-Information CRITICALITY ignore TYPE Active-Pattern-Sequence-Information PRESENCE mandatory }, . . .

CompressedModeCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . - --- ERROR INDICATION ErrorIndication ::= SEQUENCE { protocolIEs ProtocolIE-Container {{ErrorIndication-IEs}}, protocolExtensions ProtocolExtensionContainer {{ErrorIndication-Extensions}} OPTIONAL. . . . } ErrorIndication-IEs RNSAP-PROTOCOL-IES ::= { ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE optional } { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }, . . . } ErrorIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= { PRESENCE optional } ID id-S-RNTI CRITICALITY ignore EXTENSION S-RNTI ID id-D-RNTI CRITICALITY ignore EXTENSION D-RNTI d-S-RNTI CRITICALITY ignore EXTENSION Extended-RNTI PRESENCE optional } | { ID id-Extended-S-RNTI PRESENCE optional }, . . . \*\*\*\*\*\*\*\*\*\*\* -- COMMON MEASUREMENT INITIATION REQUEST - -CommonMeasurementInitiationRequest ::= SEQUENCE { ProtocolIE-Container {{CommonMeasurementInitiationReguest-IEs}}, protocolIEs ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}} protocolExtensions OPTIONAL, . . . } CommonMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= { { ID id-MeasurementID CRITICALITY reject TYPE MeasurementID PRESENCE mandatory }| { ID id-CommonMeasurementObjectType-CM-Rqst CRITICALITY reject TYPE CommonMeasurementObjectType-CM-Rqst PRESENCE mandatory } | { ID id-CommonMeasurementType CRITICALITY reject TYPE CommonMeasurementType PRESENCE mandatory }| { ID id-MeasurementFilterCoefficient CRITICALITY reject TYPE MeasurementFilterCoefficient PRESENCE optional } -- UTRAN only { ID id-ReportCharacteristics CRITICALITY reject TYPE ReportCharacteristics PRESENCE mandatory }|

```
{ ID id-SFNReportingIndicator
                                            CRITICALITY reject TYPE
                                                                         FNReportingIndicator
    PRESENCE mandatory }
    { ID id-SFN
                                            CRITICALITY reject TYPE
                                                                         SFN
    PRESENCE optional }|
    -- UTRAN only
    { ID id-CommonMeasurementAccuracy
                                            CRITICALITY reject TYPE
                                                                         CommonMeasurementAccuracy
    PRESENCE optional },
    -- UTRAN only
    . . .
CommonMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ID id-MeasurementRecoveryBehavior
                                                    CRITICALITY ignore EXTENSION MeasurementRecoveryBehavior
                                                                                                                         PRESENCE optional
   }|
    -- UTRAN only
     ID id-GANSS-Time-ID
                                                    CRITICALITY ignore EXTENSION GANSS-Time-ID
                                                                                                                         PRESENCE optional } |
     ID id-Extension-CommonMeasurementObjectType-CM-Rgst CRITICALITY ignore EXTENSION Extension-CommonMeasurementObjectType-CM-Rgst
    PRESENCE optional },
    . . .
CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
    cell
                                    Cell-CM-Rqst,
    . . . .
    additional-CommonMeasurementObjectType-CM-Rqst Additional-CommonMeasurementObjectType-CM-Rqst
}
Cell-CM-Rgst ::= SEQUENCE {
    uC-ID
                                    UC-ID,
    -- May be a GERAN cell identifier
    timeSlot
                                    TimeSlot
                                                    OPTIONAL,
                                                                --3.84Mcps TDD and 7.68Mcps TDD only
    timeSlotLCR
                                    TimeSlotLCR
                                                    OPTIONAL,
                                                                --1.28Mcps TDD only
    neighbouringCellMeasurementInformation
                                                    NeighbouringCellMeasurementInfo
                                                                                         OPTIONAL,
    -- UTRAN only
                                    ProtocolExtensionContainer { { CellItem-CM-Rgst-ExtIEs } }
    iE-Extensions
                                                                                                  OPTIONAL,
    . . .
NeighbouringCellMeasurementInfo ::= SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
        CHOICE {
                neighbouringFDDCellMeasurementInformation
                                                                NeighbouringFDDCellMeasurementInformation,
                neighbouringTDDCellMeasurementInformation
                                                                NeighbouringTDDCellMeasurementInformation,
                extension-neighbouringCellMeasurementInformation
                                                                     Extension-neighbouringCellMeasurementInformation,
                extension-neighbouringCellMeasurementInformation768 Extension-neighbouringCellMeasurementInformation768
Extension-neighbouringCellMeasurementInformation
                                                   := ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformationIE }}
Extension-neighbouringCellMeasurementInformationIE RNSAP-PROTOCOL-IES ::= {
    { ID id-neighbouringTDDCellMeasurementInformationLCR
                                                            CRITICALITY reject TYPE NeighbouringTDDCellMeasurementInformationLCR
                                                                                                                                         PRESENCE
mandatory },
    . . .
```

```
Extension-neighbouringCellMeasurementInformation768 ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformation768IE }}
Extension-neighbouringCellMeasurementInformation768IE RNSAP-PROTOCOL-IES ::= {
    { ID id-neighbouringTDDCellMeasurementInformation768 CRITICALITY reject TYPE NeighbouringTDDCellMeasurementInformation768
                                                                                                                                       PRESENCE
mandatory },
    . . .
}
CellItem-CM-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UARFCNforNt
                                        CRITICALITY ignore EXTENSION UARFCN
                                                                                            PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
   { ID id-UPPCHPositionLCR
                                        CRITICALITY reject EXTENSION UPPCHPositionLCR
                                                                                            PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only
    . . .
Additional-CommonMeasurementObjectType-CM-Rgst ::= ProtocolIE-Single-Container {{ Additional-CommonMeasurementObjectType-CM-RgstIE }}
Additional-CommonMeasurementObjectType-CM-RqstIE RNSAP-PROTOCOL-IES ::= {
    { ID id-GSM-Cell-CM-Rqst CRITICALITY ignore TYPE GSM-Cell-CM-Rqst PRESENCE mandatory },
    . . .
}
GSM-Cell-CM-Rqst ::= SEQUENCE {
    CGI
                        CGI,
    iE-Extensions
                        ProtocolExtensionContainer { { GSMCell-CM-Rgst-ExtIEs} }
                                                                                        OPTIONAL,
    . . .
}
GSMCell-CM-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Extension-CommonMeasurementObjectType-CM-Rqst ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RqstIE }}
Extension-CommonMeasurementObjectType-CM-RqstIE RNSAP-PROTOCOL-IES ::= {
    { ID id-GsmCellList-CM-Rqst CRITICALITY ignore TYPE GsmCellList-CM-Rqst
                                                                                  PRESENCE mandatory },
    . . .
}
GsmCellList-CM-Rqst ::= SEQUENCE (SIZE (1..maxNoOfGsmCell)) OF GsmCellItem-CM-Rqst
GsmCellItem-CM-Rqst ::= SEQUENCE {
   measurementID
                           MeasurementID,
    asmCell
                           GSM-Cell-CM-Rqst,
    iE-Extensions ProtocolExtensionContainer { { GsmCellItem-CM-Rqst-ExtIEs } }
                                                                                                OPTIONAL.
    . . .
GsmCellItem-CM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

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\_ \_ COMMON MEASUREMENT INITIATION RESPONSE - -CommonMeasurementInitiationResponse ::= SEQUENCE { {{CommonMeasurementInitiationResponse-IEs}}, protocolIEs ProtocolIE-Container protocolExtensions ProtocolExtensionContainer {{CommonMeasurementInitiationResponse-Extensions}} OPTIONAL, . . . CommonMeasurementInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= { ID id-MeasurementID CRITICALITY ignore TYPE MeasurementID PRESENCE mandatory } | ID id-CommonMeasurementObjectType-CM-Rsp CRITICALITY ignore TYPE CommonMeasurementObjectType-CM-Rsp PRESENCE optional } { ID id-SFN CRITICALITY ignore TYPE SFN PRESENCE optional } -- UTRAN only { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }| { ID id-CommonMeasurementAccuracy PRESENCE optional }, CRITICALITY reject TYPE CommonMeasurementAccuracy -- UTRAN only . . . CommonMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= { { ID id-MeasurementRecoverySupportIndicator CRITICALITY ignore EXTENSION MeasurementRecoverySupportIndicator PRESENCE optional } ] -- UTRAN only { ID id-Extension-CommonMeasurementObjectType-CM-Rsp CRITICALITY ignore EXTENSION Extension-CommonMeasurementObjectType-CM-Rsp PRESENCE optional}, . . . CommonMeasurementObjectType-CM-Rsp ::= CHOICE { cell Cell-CM-Rsp, . . . Cell-CM-Rsp ::= SEQUENCE { commonMeasurementValue CommonMeasurementValue, ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs } } iE-Extensions OPTIONAL, . . . } CellItem-CM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { Extension-CommonMeasurementObjectType-CM-Rsp ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RspIE }} Extension-CommonMeasurementObjectType-CM-RspIE RNSAP-PROTOCOL-IES ::= { { ID id-GsmCellList-CM-Rsp CRITICALITY ignore TYPE GsmCellList-CM-Rsp PRESENCE mandatory }, . . . }

GsmCellList-CM-Rsp ::= SEQUENCE (SIZE (1..maxNoOfGsmCell)) OF GsmCellItem-CM-Rsp

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GsmCellItem-CM-Rsp ::= SEQUENCE { measurementID MeasurementID, commonMeasurementValue CommonMeasurementValue OPTIONAL. iE-Extensions ProtocolExtensionContainer { { GsmCellItem-CM-Rsp-ExtIEs } } OPTIONAL, . . . 3 GsmCellItem-CM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . \_ \_ -- COMMON MEASUREMENT INITIATION FAILURE - -CommonMeasurementInitiationFailure ::= SEQUENCE { {{CommonMeasurementInitiationFailure-IEs}}, protocolIEs ProtocolIE-Container protocolExtensions ProtocolExtensionContainer {{CommonMeasurementInitiationFailure-Extensions}} OPTIONAL, . . . } CommonMeasurementInitiationFailure-IEs RNSAP-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 RNSAP-PROTOCOL-EXTENSION ::= { { ID id-Extension-FailureMeasurementList CRITICALITY ignore EXTENSION Extension-FailureMeasurementList PRESENCE optional }, . . . } Extension-FailureMeasurementList ::= SEQUENCE (SIZE (1..maxNoOfGsmCell)) OF Extension-FailureMeasurementItem Extension-FailureMeasurementItem ::= SEQUENCE { measurementID MeasurementID, cause Cause, ProtocolExtensionContainer { { Extension-FailureMeasurementItem-ExtIEs } } iE-Extensions OPTIONAL, . . . Extension-FailureMeasurementItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . - --- COMMON MEASUREMENT REPORT - -

```
CommonMeasurementReport ::= SEQUENCE {
    protocolIEs
                      ProtocolIE-Container {{CommonMeasurementReport-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{CommonMeasurementReport-Extensions}}
                                                                                                 OPTIONAL.
    . . .
3
CommonMeasurementReport-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                                CRITICALITY ignore TYPE MeasurementID
                                                                                                                 PRESENCE mandatorv }
     ID id-CommonMeasurementObjectType-CM-Rprt CRITICALITY iqnore TYPE CommonMeasurementObjectType-CM-Rprt
                                                                                                                 PRESENCE mandatory }|
                                                                                                                 PRESENCE optional },
     ID id-SFN
                                                CRITICALITY ignore TYPE SFN
    -- UTRAN only
    . . .
CommonMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-MeasurementRecoveryReportingIndicator
                                                       CRITICALITY ignore EXTENSION MeasurementRecoveryReportingIndicator
                                                                                                                                PRESENCE optional }|
    -- UTRAN only
    { ID id-Extension-CommonMeasurementObjectType-CM-Rprt CRITICALITY ignore EXTENSION Extension-CommonMeasurementObjectType-CM-Rprt
    PRESENCE optional },
    . . .
CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
    cell
                                    Cell-CM-Rprt,
    . . .
 }
Cell-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation CommonMeasurementValueInformation,
                                    ProtocolExtensionContainer {{ CellItem-CM-Rprt-ExtIEs }}
    iE-Extensions
                                                                                                  OPTIONAL,
    . . .
CellItem-CM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Extension-CommonMeasurementObjectType-CM-Rprt ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RprtIE }}
Extension-CommonMeasurementObjectType-CM-RprtIE RNSAP-PROTOCOL-IES ::= {
    { ID id-GsmCellList-CM-Rprt CRITICALITY ignore TYPE GsmCellList-CM-Rprt
                                                                                    PRESENCE mandatory },
    . . .
GsmCellList-CM-Rprt ::= SEOUENCE (SIZE (1..maxNoOfGsmCell)) OF GsmCellItem-CM-Rprt
GsmCellItem-CM-Rprt ::= SEOUENCE {
   measurementID
                                                MeasurementID,
    commonMeasurementValueInformation
                                                CommonMeasurementValueInformation,
                                                ProtocolExtensionContainer { { GsmCellItem-CM-Rprt-ExtIEs } }
   iE-Extensions
                                                                                                                        OPTIONAL,
    . . .
}
GsmCellItem-CM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
. . .
    - -
- -
  COMMON MEASUREMENT TERMINATION REQUEST
- -
  *****
CommonMeasurementTerminationRequest ::= SEQUENCE {
                        ProtocolIE-Container
                                             {{CommonMeasurementTerminationRequest-IEs}},
   protocolIEs
                        ProtocolExtensionContainer {{CommonMeasurementTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                          OPTIONAL,
   . . .
CommonMeasurementTerminationReguest-IEs RNSAP-PROTOCOL-IES ::= {
   { ID
          id-MeasurementID
                              CRITICALITY
                                                 ignore
                                                                  TYPE
                                                                         MeasurementID
                                                                                                   PRESENCE
                                                                                                                mandatory },
   . . .
}
CommonMeasurementTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extension-TerminationMeasurementList CRITICALITY ignore EXTENSION Extension-TerminationMeasurementList PRESENCE optional },
   . . .
}
Extension-TerminationMeasurementList ::= SEQUENCE (SIZE (1..maxNoOfGsmCell)) OF Extension-TerminationMeasurementItem
Extension-TerminationMeasurementItem ::= SEQUENCE {
   measurementID
                                   MeasurementID,
                                   ProtocolExtensionContainer { { Extension-TerminationMeasurementItem-ExtIEs } } OPTIONAL,
   iE-Extensions
   . . .
Extension-TerminationMeasurementItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
    _ _
  COMMON MEASUREMENT FAILURE INDICATION
_ _
  CommonMeasurementFailureIndication ::= SEQUENCE {
                        ProtocolIE-Container
                                              {{CommonMeasurementFailureIndication-IEs}},
   protocolIEs
   protocolExtensions
                            ProtocolExtensionContainer {{CommonMeasurementFailureIndication-Extensions}}
                                                                                                                       OPTIONAL,
   . . .
}
CommonMeasurementFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
                                                                                                                }|
     ID
         id-MeasurementID
                                   CRITICALITY ignore
                                                           TYPE
                                                                  MeasurementID
                                                                                      PRESENCE
                                                                                                   mandatory
    ID
          id-Cause
                                   CRITICALITY ignore
                                                            TYPE
                                                                  Cause
                                                                                      PRESENCE
                                                                                                   mandatory
                                                                                                                },
   . . .
```

CommonMeasurementFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= { { ID id-Extension-FailureIndicationMeasurementList CRITICALITY ignore EXTENSION Extension-FailureIndicationMeasurementList PRESENCE optional }, . . . } Extension-FailureIndicationMeasurementList ::= SEOUENCE (SIZE (1..maxNoOfGsmCell)) OF Extension-FailureIndicationMeasurementItem Extension-FailureIndicationMeasurementItem ::= SEQUENCE { measurementID MeasurementID, cause Cause, ProtocolExtensionContainer { { Extension-FailureIndicationMeasurementItem-ExtIEs } } OPTIONAL iE-Extensions . . . } Extension-FailureIndicationMeasurementItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { - --- INFORMATION EXCHANGE INITIATION REQUEST InformationExchangeInitiationRequest ::= SEQUENCE { protocolIEs ProtocolIE-Container {{InformationExchangeInitiationRequest-IEs}}, ProtocolExtensionContainer {{InformationExchangeInitiationRequest-Extensions}} protocolExtensions OPTIONAL, . . . } InformationExchangeInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= { id-InformationExchangeID CRITICALITY reject TYPE { ID InformationExchangeID mandatory }| PRESENCE id-InformationExchangeObjectType-InfEx-Rqst { ID CRITICALITY reject TYPE InformationExchangeObjectType-InfEx-Rqst PRESENCE mandatory }| { ID id-InformationType CRITICALITY reject TYPE InformationType PRESENCE mandatory }| id-InformationReportCharacteristics { ID CRITICALITY reject TYPE InformationReportCharacteristics PRESENCE mandatory }, . . . InformationExchangeInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . } InformationExchangeObjectType-InfEx-Rqst ::= CHOICE { cell Cell-InfEx-Rqst, . . . , extension-InformationExchangeObjectType-InfEx-Rqst Extension-InformationExchangeObjectType-InfEx-Rqst

```
}
Cell-InfEx-Rgst ::= SEQUENCE {
    c-ID
                                    C-ID, --May be a GERAN cell identifier
    iE-Extensions
                                    ProtocolExtensionContainer { { CellItem-InfEx-Rgst-ExtIEs } }
                                                                                                          OPTIONAL.
    . . .
CellItem-InfEx-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Extension-InformationExchangeObjectType-InfEx-Rgst ::= ProtocollE-Single-Container {{ Extension-InformationExchangeObjectType-InfEx-RgstIE }}
Extension-InformationExchangeObjectType-InfEx-RqstIE RNSAP-PROTOCOL-IES ::= {
      ID id-GSM-Cell-InfEx-Rqst
                                                            CRITICALITY reject TYPE GSM-Cell-InfEx-Rgst
                                                                                                                                 PRESENCE mandatory } |
      ID id-MBMS-Bearer-Service-List
                                                            CRITICALITY reject TYPE MBMS-Bearer-Service-List
                                                                                                                                 PRESENCE mandatory }
     ID id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rgst
                                                            CRITICALITY reject TYPE MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rgst
                                                                                                                                        PRESENCE
mandatory } |
     ID id-MBMS-Cell-InfEx-Rqst
                                                            CRITICALITY reject TYPE MBMS-Cell-InfEx-Rqst
                                                                                                                                 PRESENCE mandatory }
      ID id-ANR-Cell-InfEx-Rqst
                                                            CRITICALITY reject TYPE ANR-Cell-InfEx-Rqst
                                                                                                                                 PRESENCE mandatory }
     ID id-Common-E-RGCH-Cell-InfEx-Rqst
                                                            CRITICALITY reject TYPE Common-E-RGCH-Cell-InfEx-Rqst
                                                                                                                                 PRESENCE mandatory }
}
GSM-Cell-InfEx-Rqst ::= SEQUENCE {
    cGI
                                    CGI,
                                    ProtocolExtensionContainer { { GSMCellItem-InfEx-Rqst-ExtIEs} }
    iE-Extensions
                                                                                                                 OPTIONAL,
    . . .
}
GSMCellItem-InfEx-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rqst ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rqst
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rgst
                                                   ::= SEQUENCE
    c-ID
                                    C-ID,
    mBMS-Bearer-Service-List-InfEx-Rqst
                                                                MBMS-Bearer-Service-List-InfEx-Rqst,
                                    ProtocolExtensionContainer { { MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rqst-ExtIEs } }
   iE-Extensions
                                                                                                                                        OPTIONAL.
    . . .
}
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MBMS-Bearer-Service-List-InfEx-Rqst ::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF TMGI
MBMS-Cell-InfEx-Rqst
                      ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF C-ID
ANR-Cell-InfEx-Rqst
                      ::= SEQUENCE (SIZE (1..maxNrOfANRCells)) OF C-ID
```

Common-E-RGCH-Cell-InfEx-Rgst := SEQUENCE (SIZE (1..maxNoOfCommonRGCells)) OF C-ID - --- INFORMATION EXCHANGE INITIATION RESPONSE InformationExchangeInitiationResponse ::= SEQUENCE { {{InformationExchangeInitiationResponse-IEs}}, protocolIEs ProtocolIE-Container protocolExtensions ProtocolExtensionContainer {{InformationExchangeInitiationResponse-Extensions}} OPTIONAL, . . . } InformationExchangeInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= { id-InformationExchangeID CRITICALITY ignore TYPE { ID 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 RNSAP-PROTOCOL-EXTENSION ::= { InformationExchangeObjectType-InfEx-Rsp ::= CHOICE { cell Cell-InfEx-Rsp, ..., extension-InformationExchangeObjectType-InfEx-Rsp Extension-InformationExchangeObjectType-InfEx-Rsp Cell-InfEx-Rsp ::= SEQUENCE { requestedDataValue RequestedDataValue, iE-Extensions ProtocolExtensionContainer { { CellItem-InfEx-Rsp-ExtIEs } } OPTIONAL, . . . } CellItem-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . Extension-InformationExchangeObjectType-InfEx-Rsp ::= ProtocolIE-Single-Container {{ Extension-InformationExchangeObjectType-InfEx-RspIE }} Extension-InformationExchangeObjectType-InfEx-RspIE RNSAP-PROTOCOL-IES ::= { ID id-MBMS-Bearer-Service-List-InfEx-Rsp CRITICALITY ignore TYPE MBMS-Bearer-Service-List-InfEx-Rsp PRESENCE mandatory } ID id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp CRITICALITY ignore TYPE MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp PRESENCE mandatory ID id-MBMS-Cell-InfEx-Rsp CRITICALITY ignore TYPE MBMS-Cell-InfEx-Rsp PRESENCE mandatory } PRESENCE mandatory } ID id-ANR-Cell-InfEx-Rsp CRITICALITY ignore TYPE ANR-Cell-InfEx-Rsp

```
{ ID id-Common-E-RGCH-Cell-InfEx-Rsp
                                                             CRITICALITY ignore TYPE Common-E-RGCH-Cell-InfEx-Rsp
                                                                                                                                 PRESENCE mandatory }
}
MBMS-Bearer-Service-List-InfEx-Rsp ::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF MBMS-Bearer-ServiceItemIEs-InfEx-Rsp
MBMS-Bearer-ServiceItemIEs-InfEx-Rsp
                                       ::=SEQUENCE{
    tmgi
          TMGI,
    requestedDataValue
                            RequestedDataValue,
                                    ProtocolExtensionContainer { { MBMS-Bearer-ServiceItem-InfEx-Rsp-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
MBMS-Bearer-ServiceItem-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rsp
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rsp ::= SEQUENCE {
    C-TD
                                    C-ID,
    mBMS-Bearer-Service-List-InfEx-Rsp
                                                                 MBMS-Bearer-Service-List-InfEx-Rsp,
                                    ProtocolExtensionContainer { { MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rsp-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
}
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MBMS-Cell-InfEx-Rsp ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Cell-Item-InfEx-Rsp
MBMS-Cell-Item-InfEx-Rsp ::= SEOUENCE {
    c-ID
                                    C-ID,
    requestedDataValue
                                    RequestedDataValue,
                                    ProtocolExtensionContainer { { MBMS-Cell-Item-InfEx-Rsp-ExtIEs } }
    iE-Extensions
                                                                                                                  OPTIONAL,
    . . .
}
MBMS-Cell-Item-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
ANR-Cell-InfEx-Rsp ::= SEQUENCE (SIZE (1..maxNrOfANRCells)) OF ANR-Cell-ItemIEs-InfEx-Rsp
ANR-Cell-ItemIEs-InfEx-Rsp ::=SEQUENCE{
    c-ID
                                    C-ID.
    requestedDataValue
                                    RequestedDataValue,
                                    ProtocolExtensionContainer { { ANR-Cell-ItemIEs-InfEx-Rsp-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
```

```
ANR-Cell-ItemIEs-InfEx-Rsp-ExtIEs
                              RNSAP-PROTOCOL-EXTENSION ::=
   . . .
                           ::= SEOUENCE (SIZE (1.. maxNoOfCommonRGCells)) OF Common-E-RGCH-Cell-ItemIEs-InfEx-Rsp
Common-E-RGCH-Cell-InfEx-Rsp
Common-E-RGCH-Cell-ItemIEs-InfEx-Rsp
                                  ::=SEQUENCE{
   c-ID
                                  C-ID,
   requestedDataValue
                                  RequestedDataValue,
                                  ProtocolExtensionContainer { { Common-E-RGCH-Cell-ItemIEs-InfEx-Rsp-ExtIEs } } OPTIONAL,
   iE-Extensions
   . . .
Common-E-RGCH-Cell-ItemIEs-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
     _ _
- -
-- INFORMATION EXCHANGE INITIATION FAILURE
- -
InformationExchangeInitiationFailure ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                            {{InformationExchangeInitiationFailure-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{InformationExchangeInitiationFailure-Extensions}}
                                                                                                       OPTIONAL,
   . . .
}
InformationExchangeInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-InformationExchangeID
                                            CRITICALITY
                                                          ignore
                                                                        TYPE
                                                                              InformationExchangeID
   PRESENCE mandatory } |
   { ID
         id-Cause
                                            CRITICALITY
                                                                        TYPE
                                                          iqnore
                                                                              Cause
          PRESENCE
                   mandatory }|
   { ID id-CriticalityDiagnostics
                                            CRITICALITY
                                                          iqnore
                                                                        TYPE
                                                                              CriticalityDiaqnostics
   PRESENCE optional },
   . . .
InformationExchangeInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
     - -
-- INFORMATION REPORT
- -
InformationReport ::= SEQUENCE {
                       ProtocolIE-Container {{InformationReport-IEs}},
   protocolIEs
   protocolExtensions
                       ProtocolExtensionContainer {{InformationReport-Extensions}}
                                                                                  OPTIONAL,
   . . .
```

```
InformationReport-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-InformationExchangeID
                                                            CRITICALITY ignore
                                                                                         TYPE
                                                                                                 InformationExchangeID
                PRESENCE mandatory }|
           id-InformationExchangeObjectType-InfEx-Rprt
                                                            CRITICALITY ignore
                                                                                         TYPE
                                                                                                 InformationExchangeObjectType-InfEx-Rprt
    { ID
    PRESENCE
               mandatory },
    . . .
InformationReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
}
InformationExchangeObjectType-InfEx-Rprt ::= CHOICE {
    cell
                                    Cell-InfEx-Rprt,
    . . . ,
    extension-InformationExchangeObjectType-InfEx-Rprt
                                                            Extension-InformationExchangeObjectType-InfEx-Rprt
 J
Extension-InformationExchangeObjectType-InfEx-Rprt ::= ProtocollE-Single-Container {{ Extension-InformationExchangeObjectType-InfEx-RprtIE }}
Extension-InformationExchangeObjectType-InfEx-RprtIE RNSAP-PROTOCOL-IES ::= {
      ID id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt CRITICALITY ignore TYPE MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt
                                                                                                                                 PRESENCE mandatory }
      ID id-MBMS-Cell-InfEx-Rprt
                                                        CRITICALITY ignore TYPE MBMS-Cell-InfEx-Rprt
                                                                                                                                 PRESENCE mandatory } |
     ID id-Common-E-RGCH-Cell-InfEx-Rprt
                                                        CRITICALITY ignore TYPE Common-E-RGCH-Cell-InfEx-Rprt
                                                                                                                                 PRESENCE mandatory }
Cell-InfEx-Rprt ::= SEQUENCE {
    requestedDataValueInformation
                                    RequestedDataValueInformation,
   iE-Extensions
                                    ProtocolExtensionContainer {{ CellItem-InfEx-Rprt-ExtIEs }}
                                                                                                          OPTIONAL.
    . . .
CellItem-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt
                                                    ::= SEOUENCE
    C-TD
                                    C-ID,
    mBMS-Bearer-Service-List-InfEx-Rprt
                                                                MBMS-Bearer-Service-List-InfEx-Rprt,
    iE-Extensions
                                    ProtocolExtensionContainer { { MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt-ExtIEs } }
                                                                                                                                        OPTIONAL.
    . . .
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
MBMS-Bearer-Service-List-InfEx-Rprt ::= SEOUENCE (SIZE (1..maxNrOfMBMSServices)) OF MBMS-Bearer-Service-List-Item-InfEx-Rprt
MBMS-Bearer-Service-List-Item-InfEx-Rprt
                                         ::= SEQUENCE {
   tmqi
                          TMGI.
                                 RequestedDataValueInformation,
   requestedDataValueInformation
                                 ProtocolExtensionContainer { { MBMS-Bearer-Service-List-Item-InfEx-Rprt-ExtIEs } }
   iE-Extensions
                                                                                                                        OPTIONAL,
   . . .
}
MBMS-Bearer-Service-List-Item-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MBMS-Cell-InfEx-Rprt
                     ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Cell-Item-InfEx-Rprt
MBMS-Cell-Item-InfEx-Rprt ::= SEQUENCE {
                                 C-ID,
   c-ID
   requestedDataValueInformation RequestedDataValueInformation,
                                 ProtocolExtensionContainer { { MBMS-Cell-Item-InfEx-Rprt-ExtIEs } }
   iE-Extensions
                                                                                                         OPTIONAL,
   . . .
MBMS-Cell-Item-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Common-E-RGCH-Cell-InfEx-Rprt ::= SEQUENCE (SIZE (1.. maxNoOfCommonRGCells)) OF Common-E-RGCH-Cell-Item-InfEx-Rprt
Common-E-RGCH-Cell-Item-InfEx-Rprt ::= SEQUENCE {
   c-ID
                                     C-ID,
   requestedDataValueInformation
                                     RequestedDataValueInformation,
   iE-Extensions
                                     ProtocolExtensionContainer { { Common-E-RGCH-Cell-Item-InfEx-Rprt-ExtIEs } }
                                                                                                                OPTIONAL,
   . . .
Common-E-RGCH-Cell-Item-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  - -
-- INFORMATION EXCHANGE TERMINATION REQUEST
InformationExchangeTerminationRequest ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                 {{InformationExchangeTerminationReguest-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{InformationExchangeTerminationRequest-Extensions}}
                                                                                                                 OPTIONAL,
   . . .
}
InformationExchangeTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
```

```
{ ID
         id-InformationExchangeID
                                        CRITICALITY
                                                                              InformationExchangeID
                                                                                                                   PRESENCE
                                                      iqnore
                                                                       TYPE
   mandatory },
   . . .
InformationExchangeTerminationReguest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
     - -
_ _
  INFORMATION EXCHANGE FAILURE INDICATION
_ _
  InformationExchangeFailureIndication ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                            {{InformationExchangeFailureIndication-IEs}},
                           ProtocolExtensionContainer {{InformationExchangeFailureIndication-Extensions}}
   protocolExtensions
                                                                                                                   OPTIONAL,
   . . .
}
InformationExchangeFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-InformationExchangeID
                                        CRITICALITY ignore
                                                                TYPE
                                                                       InformationExchangeID
                                                                                                            PRESENCE
   mandatory }|
   { ID id-Cause
                                        CRITICALITY ignore
                                                                                                                   PRESENCE
                                                                TYPE
                                                                       Cause
   mandatory },
   . . .
}
InformationExchangeFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
     - -
-- RESET REOUEST
ResetRequest ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                            {{ResetRequest-IEs}},
                       ProtocolExtensionContainer {{ResetRequest-Extensions}}
   protocolExtensions
                                                                          OPTIONAL,
   . . .
ResetRequest-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-RNC-ID
                          CRITICALITY reject TYPE RNC-ID
                                                         PRESENCE mandatory}
    ID id-ResetIndicator
                          CRITICALITY reject
                                               TYPE ResetIndicator
                                                                       PRESENCE
                                                                                 mandatory },
   . . .
}
ResetRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

```
. . .
3
ResetIndicator ::= CHOICE {
                    ContextList-Reset,
    context
                        NULL,
    all-contexts
    ...,
    contextGroup
                    ContextGroupList-Reset
}
ContextList-Reset ::= SEQUENCE {
    contextInfoList-Reset
                                ContextInfoList-Reset,
                                             ProtocolExtensionContainer { {ContextItem-Reset-ExtIEs} }
    iE-Extensions
                                                                                                                   OPTIONAL,
    . . .
}
ContextItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
ContextInfoList-Reset ::= SEQUENCE (SIZE (1.. maxResetContext)) OF ProtocolIE-Single-Container {{ ContextInfoItemIE-Reset }}
ContextInfoItemIE-Reset RNSAP-PROTOCOL-IES ::= {
                                        CRITICALITY reject
    {ID id-ContextInfoItem-Reset
                                                                 TYPE ContextInfoItem-Reset
                                                                                                  PRESENCE mandatory }
ContextInfoItem-Reset ::= SEQUENCE {
    contextType-Reset
                                ContextType-Reset,
                                ProtocolExtensionContainer { { ContextInfoItem-Reset-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
ContextInfoItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
ContextType-Reset ::= CHOICE {
                    S-RNTI,
    sRNTI
    drnti
                    D-RNTI,
    ...,
    extension-ContextType-Reset Extension-ContextType-Reset
Extension-ContextType-Reset ::= ProtocolIE-Single-Container {{ Extension-ContextType-ResetIE }}
Extension-ContextType-ResetIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Extended-S-RNTI
                                CRITICALITY reject TYPE Extended-RNTI
                                                                             PRESENCE mandatory },
    . . .
}
ContextGroupList-Reset ::= SEQUENCE {
    contextGroupInfoList-Reset
                                    ContextGroupInfoList-Reset,
    iE-Extensions
                                    ProtocolExtensionContainer { {ContextGroupItem-Reset-ExtIEs} }
                                                                                                                   OPTIONAL,
    . . .
```

```
}
ContextGroupItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
ContextGroupInfoList-Reset ::= SEQUENCE (SIZE (1.. maxResetContextGroup)) OF ProtocolIE-Single-Container {{ ContextGroupInfoItemIE-Reset }}
ContextGroupInfoItemIE-Reset RNSAP-PROTOCOL-IES ::= {
   {ID id-ContextGroupInfoItem-Reset
                                 CRITICALITY reject
                                                         TYPE ContextGroupInfoItem-Reset
                                                                                              PRESENCE mandatory }
ContextGroupInfoItem-Reset ::= SEQUENCE {
                 S-RNTI-Group,
   s-RNTI-Group
   iE-Extensions
                        ProtocolExtensionContainer { { ContextGroupInfoItem-Reset-ExtIEs } }
                                                                                              OPTIONAL,
   . . .
ContextGroupInfoItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extended-S-RNTI-Group CRITICALITY reject EXTENSION Extended-S-RNTI-Group
                                                                             PRESENCE optional },
   . . .
  - -
-- RESET RESPONSE
     ResetResponse ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                           {{ResetResponse-IEs}},
   protocolExtensionS ProtocolExtensionContainer {{ResetResponse-Extensions}}
                                                                                OPTIONAL,
   . . .
}
ResetResponse-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-RNC-ID
                 CRITICALITY ignore TYPE RNC-ID
                                                         PRESENCE mandatory }
    ID id-CriticalityDiagnostics CRITICALITY ignore
                                                         TYPE CriticalityDiagnostics
                                                                                              PRESENCE
                                                                                                           optional},
   . . .
}
ResetResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extended-RNC-ID
                                                                             PRESENCE optional },
                                 CRITICALITY reject EXTENSION Extended-RNC-ID
   . . .
  ************
- -
-- RADIO LINK ACTIVATION COMMAND FDD
_ _
  RadioLinkActivationCommandFDD ::= SEQUENCE {
                                           {{RadioLinkActivationCommandFDD-IEs}},
   protocolIEs
                   ProtocolIE-Container
```

```
ProtocolExtensionContainer {{RadioLinkActivationCommandFDD-Extensions}}
                                                                                                                 OPTIONAL,
   protocolExtensions
RadioLinkActivationCommandFDD-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-DelayedActivationList-RL-ActivationCmdFDD
                                                        CRITICALITY ignore TYPE
                                                                                  DelayedActivationInformationList-RL-ActivationCmdFDD
       PRESENCE mandatory },
   . . .
}
RadioLinkActivationCommandFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
3
DelayedActivationInformationList-RL-ActivationCmdFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container
     DelayedActivationInformation-RL-ActivationCmdFDD-IEs } }
DelayedActivationInformation-RL-ActivationCmdFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-DelayedActivationInformation-RL-ActivationCmdFDD CRITICALITY ignore TYPE DelayedActivationInformation-RL-ActivationCmdFDD
   PRESENCE optional
}
DelayedActivationInformation-RL-ActivationCmdFDD ::= SEQUENCE {
   rL-ID
                              RL-ID,
   delayed-activation-update DelayedActivationUpdate,
   iE-Extensions
                              ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs } } OPTIONAL,
   . . .
DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
  - -
-- RADIO LINK ACTIVATION COMMAND TDD
- -
  RadioLinkActivationCommandTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                {{RadioLinkActivationCommandTDD-IEs}},
                          ProtocolExtensionContainer {{RadioLinkActivationCommandTDD-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
   . . .
}
RadioLinkActivationCommandTDD-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-DelayedActivationList-RL-ActivationCmdTDD
                                                        CRITICALITY ignore TYPE
                                                                                  DelayedActivationInformationList-RL-ActivationCmdTDD
       PRESENCE mandatory },
   . . .
}
RadioLinkActivationCommandTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
DelayedActivationInformationList-RL-ActivationCmdTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container
     DelayedActivationInformation-RL-ActivationCmdTDD-IEs } }
DelayedActivationInformation-RL-ActivationCmdTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-DelayedActivationInformation-RL-ActivationCmdTDD CRITICALITY ignore TYPE DelayedActivationInformation-RL-ActivationCmdTDD
   PRESENCE optional }
DelayedActivationInformation-RL-ActivationCmdTDD ::= SEQUENCE {
   rL-ID
                             RL-ID,
   delayed-activation-update DelayedActivationUpdate,
   iE-Extensions
                             ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs } } OPTIONAL,
   . . .
DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    GERAN UPLINK SIGNALLING TRANSFER INDICATION
- -
  GERANUplinkSignallingTransferIndication ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                           {GERANUplinkSignallingTransferIndication-IEs}},
                                 ProtocolExtensionContainer {{GERANUplinkSignallingTransferIndication-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
   . . .
}
GERANUplinkSignallingTransferIndication-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-UC-ID
                                    CRITICALITY ignore TYPE UC-ID
                                                                                        PRESENCE mandatory
   -- UC-Id may be GERAN cell identifier.
    { ID id-SAI
                                    CRITICALITY ignore TYPE SAI
                                                                                        PRESENCE mandatory
     ID id-S-RNTI
                                    CRITICALITY ignore TYPE S-RNTI
                                                                                        PRESENCE mandatory
     ID id-D-RNTI
                                    CRITICALITY ignore TYPE D-RNTI
                                                                                        PRESENCE optional
     ID id-L3-Information
                                    CRITICALITY ignore TYPE L3-Information
                                                                                        PRESENCE mandatory
     ID id-CN-PS-DomainIdentifier
                                    CRITICALITY ignore TYPE CN-PS-DomainIdentifier
                                                                                        PRESENCE optional
     ID id-CN-CS-DomainIdentifier
                                    CRITICALITY ignore TYPE CN-CS-DomainIdentifier
                                                                                        PRESENCE optional
     ID id-URA-Information
                                    CRITICALITY ignore TYPE URA-Information
                                                                                        PRESENCE optional
   -- URA information may be GRA information
   . . .
GERANUplinkSignallingTransferIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::=
    {ID id-Extended-S-RNTI
                             CRITICALITY ignore EXTENSION Extended-RNTI
                                                                         PRESENCE optional },
   . . .
  _ _
-- RADIO LINK PARAMETER UPDATE INDICATION FDD
```

```
RadioLinkParameterUpdateIndicationFDD ::= SEQUENCE {
                           ProtocolIE-Container
                                                   {{RadioLinkParameterUpdateIndicationFDD-IEs}},
    protocolIEs
                           ProtocolExtensionContainer {{RadioLinkParameterUpdateIndicationFDD-Extensions}}
   protocolExtensions
                                                                                                                     OPTIONAL,
    . . .
RadioLinkParameterUpdateIndicationFDD-IEs RNSAP-PROTOCOL-IES ::= {
          id-HSDSCH-FDD-Update-Information
    { ID
                                                                  CRITICALITY ignore TYPE
                                                                                              HSDSCH-FDD-Update-Information
    PRESENCE optional } |
    { ID id-RL-ParameterUpdateIndicationFDD-RL-InformationList CRITICALITY ignore TYPE
                                                                                              RL-ParameterUpdateIndicationFDD-RL-InformationList
       PRESENCE optional },
    . . .
RL-ParameterUpdateIndicationFDD-RL-InformationList ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { { RL-
ParameterUpdateIndicationFDD-RL-InformationList-IEs} }
RL-ParameterUpdateIndicationFDD-RL-InformationList-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-ParameterUpdateIndicationFDD-RL-Information-Item CRITICALITY ignore TYPE RL-ParameterUpdateIndicationFDD-RL-Information-Item
       PRESENCE mandatory }
}
RL-ParameterUpdateIndicationFDD-RL-Information-Item::= SEQUENCE {
    rL-ID
                                       RL-ID,
    phase-Reference-Update-Indicator
                                       Phase-Reference-Update-Indicator
                                                                          OPTIONAL,
                                       ProtocolExtensionContainer { { RL-ParameterUpdateIndicationFDD-RL-Information-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
RL-ParameterUpdateIndicationFDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RadioLinkParameterUpdateIndicationFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-E-DCH-FDD-Update-Information
                                                      CRITICALITY ignore EXTENSION E-DCH-FDD-Update-Information
                                                                                                                             PRESENCE optional } |
    ID id-Additional-HS-Cell-Information-RL-Param-Upd CRITICALITY ignore EXTENSION Additional-HS-Cell-Information-RL-Param-Upd
                                                                                                                                    PRESENCE
optional}
    { ID id-Additional-EDCH-Cell-Information-RL-Param-Upd CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-RL-Param-Upd
    PRESENCE optional } |
     ID id-CPC-RecoveryReport
                                                       CRITICALITY ignore EXTENSION CPC-RecoveryReport
                                                                                                                             PRESENCE optional } |
    { ID id-UL-CLTD-State-Update-Information
                                                       CRITICALITY ignore EXTENSION UL-CLTD-State-Update-Information
                                                                                                                             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 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 RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
Additional-EDCH-Cell-Information-RL-Param-Upd ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-Cell-Information-RL-Param-Upd-ItemIEs
Additional-EDCH-Cell-Information-RL-Param-Upd-ItemIEs ::=SEQUENCE{
   additional-EDCH-FDD-Update-Information
                                                                      Additional-EDCH-FDD-Update-Information,
   iE-Extensions
                               ProtocolExtensionContainer { { Additional-EDCH-FDD-Update-Information-ExtIEs } } OPTIONAL,
   . . .
}
Additional-EDCH-FDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   - -
-- RADIO LINK PARAMETER UPDATE INDICATION TDD
RadioLinkParameterUpdateIndicationTDD ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                              {{RadioLinkParameterUpdateIndicationTDD-IEs}},
                        ProtocolExtensionContainer {{RadioLinkParameterUpdateIndicationTDD-Extensions}}
   protocolExtensions
                                                                                                         OPTIONAL,
   . . .
}
RadioLinkParameterUpdateIndicationTDD-IEs RNSAP-PROTOCOL-IES ::= {
          id-HSDSCH-TDD-Update-Information
                                                                      TYPE
                                                                             HSDSCH-TDD-Update-Information
                                                                                                                      PRESENCE
   { ID
                                             CRITICALITY
                                                           iqnore
   optional},
   . . .
}
RadioLinkParameterUpdateIndicationTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
    - -
  UE MEASUREMENT INITIATION REQUEST
- -
    UEMeasurementInitiationRequest ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                        {UEMeasurementInitiationRequest-IEs}},
   protocolExtensions
                               ProtocolExtensionContainer {{UEMeasurementInitiationRequest-Extensions}}
                                                                                                               OPTIONAL,
   . . .
```

UEMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= { ID id-AllowedQueuingTime CRITICALITY reject TYPE AllowedQueuingTime PRESENCE optional } | ID id-MeasurementID CRITICALITY reject TYPE MeasurementID PRESENCE mandatory ID id-UEMeasurementType CRITICALITY reject TYPE UEMeasurementType PRESENCE mandatory ID id-UEMeasurementTimeslotInfoHCR CRITICALITY reject TYPE UEMeasurementTimeslotInfoHCR PRESENCE optional ID id-UEMeasurementTimeslotInfoLCR CRITICALITY reject TYPE UEMeasurementTimeslotInfoLCR PRESENCE optional ID id-MeasurementFilterCoefficient CRITICALITY reject TYPE MeasurementFilterCoefficient PRESENCE optional ID id-UEMeasurementReportCharacteristics CRITICALITY reject TYPE UEMeasurementReportCharacteristics PRESENCE mandatory ID id-UEMeasurementParameterModAllow CRITICALITY reject TYPE UEMeasurementParameterModAllow PRESENCE mandatory }, UEMeasurementInitiationReguest-Extensions RNSAP-PROTOCOL-EXTENSION ::= { { ID id-UEMeasurementTimeslotInfo768 CRITICALITY reject EXTENSION UEMeasurementTimeslotInfo768 PRESENCE optional }, . . . - -UE MEASUREMENT INITIATION RESPONSE UEMeasurementInitiationResponse ::= SEQUENCE { protocolIEs ProtocolIE-Container {{UEMeasurementInitiationResponse-IEs}}, protocolExtensions ProtocolExtensionContainer {{UEMeasurementInitiationResponse-Extensions}} OPTIONAL, . . . } UEMeasurementInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= { ID id-MeasurementID CRITICALITY ignore TYPE MeasurementID PRESENCE mandatory ID id-MeasurementFilterCoefficient CRITICALITY reject TYPE MeasurementFilterCoefficient PRESENCE optional ID id-UEMeasurementReportCharacteristics CRITICALITY reject TYPE UEMeasurementReportCharacteristics PRESENCE optional ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional ١, . . . UEMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= · . . . \_ \_ -- UE MEASUREMENT INITIATION FAILURE - -

```
UEMeasurementInitiationFailure ::= SEQUENCE {
   protocolIEs ProtocolIE-Container
                                                    {{UEMeasurementInitiationFailure-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{UEMeasurementInitiationFailure-Extensions}}
                                                                                                        OPTIONAL.
   . . .
UEMeasurementInitiationFailure-IEs RNSAP-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
   . . .
UEMeasurementInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
  *****
- -
-- UE MEASUREMENT REPORT
- -
  **********
UEMeasurementReport ::= SEQUENCE {
                                                    {{UEMeasurementReport-IEs}},
   protocolIEs
                             ProtocolIE-Container
   protocolExtensions
                             ProtocolExtensionContainer {{UEMeasurementReport-Extensions}}
                                                                                               OPTIONAL,
   . . .
}
UEMeasurementReport-IES RNSAP-PROTOCOL-IES ::= {
    ID id-MeasurementID
                                    CRITICALITY ignore TYPE MeasurementID
                                                                                            PRESENCE mandatory
   { ID id-UEMeasurementValueInformation CRITICALITY iqnore TYPE UEMeasurementValueInformation
                                                                                            PRESENCE mandatory
   . . .
}
UEMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
  - -
-- UE MEASUREMENT TERMINATION REQUEST
UEMeasurementTerminationRequest ::= SEQUENCE {
   protocolIEs
                             ProtocolIE-Container
                                                    {{UEMeasurementTerminationRequest-IEs}},
                            ProtocolExtensionContainer {{UEMeasurementTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                         OPTIONAL,
   . . .
}
```

```
UEMeasurementTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
```

}.

```
{ ID id-MeasurementID
                                  CRITICALITY ignore TYPE MeasurementID
                                                                                PRESENCE mandatory },
}
UEMeasurementTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
      - -
-- UE MEASUREMENT FAILURE INDICATION
- -
UEMeasurementFailureIndication ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                       {{UEMeasurementFailureIndication-IEs}},
   protocolExtensions
                               ProtocolExtensionContainer {{UEMeasurementFailureIndication-Extensions}}
                                                                                                               OPTIONAL,
   . . .
}
UEMeasurementFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                  CRITICALITY ignore TYPE MeasurementID
                                                                                PRESENCE mandatory
                                  CRITICALITY ignore TYPE Cause
                                                                                PRESENCE mandatory
    ID id-Cause
   . . .
UEMeasurementFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
   - -
-- IUR INVOKE TRACE
- -
  **********
IurInvokeTrace ::= SEQUENCE {
                                                                  {{IurInvokeTrace-IEs}},
   protocolIEs
                                          ProtocolIE-Container
                                         ProtocolExtensionContainer {{IurInvokeTrace-Extensions}}
   protocolExtensions
                                                                                                         OPTIONAL,
   . . .
}
IurInvokeTrace-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-D-RNTI
                                          CRITICALITY ignore TYPE D-RNTI
                                                                                                               PRESENCE optional
      } |
     ID id-TraceReference
                                          CRITICALITY ignore TYPE TraceReference
                                                                                                               PRESENCE mandatory
     ID id-UEIdentity
                                          CRITICALITY ignore TYPE UEIdentity
                                                                                                               PRESENCE mandatory
     ID id-TraceRecordingSessionReference
                                          CRITICALITY ignore TYPE TraceRecordingSessionReference
                                                                                                         PRESENCE mandatory
                                                                                                                            }|
     ID id-ListOfInterfacesToTrace
                                          CRITICALITY ignore TYPE ListOfInterfacesToTrace
                                                                                                               PRESENCE optional
      } |
     ID id-TraceDepth
                                          CRITICALITY ignore TYPE TraceDepth
                                                                                                               PRESENCE mandatory
```

```
. . .
}
ListOfInterfacesToTrace ::= SEQUENCE (SIZE (1..maxNrOfInterfaces)) OF ProtocolIE-Single-Container {{ InterfacesToBeTracedItemIE }}
InterfacesToBeTracedItemIE RNSAP-PROTOCOL-IES ::= {
     ID id-InterfacesToTraceItem
                                           CRITICALITY ignore TYPE InterfacesToTraceItem
                                                                                                                  PRESENCE mandatory
}
InterfacesToTraceItem ::= SEQUENCE {
                        ENUMERATED {iub, iur, ... },
   interface
                       ProtocolExtensionContainer { { InterfacesToTraceItem-ExtIEs } } OPTIONAL,
   iE-Extensions
   . . .
}
InterfacesToTraceItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
}
IurInvokeTrace-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 10 to support MDT
   {ID id-MDT-Configuration
                                           CRITICALITY ignore EXTENSION MDT-Configuration
                                                                                              PRESENCE optional } |
-- Extension for Release 10 to support MDT
   {ID id-Trace-Collection-Entity-IP-Address CRITICALITY ignore EXTENSION TransportLayerAddress
                                                                                              PRESENCE optional },
   . . .
}
    - -
-- IUR DEACTIVATE TRACE
- -
IurDeactivateTrace ::= SEQUENCE {
   protocolIEs
                                           ProtocolIE-Container
                                                                    {{IurDeactivateTrace-IEs}},
                                           ProtocolExtensionContainer {{IurDeactivateTrace-Extensions}}
   protocolExtensions
                                                                                                    OPTIONAL,
   . . .
}
IurDeactivateTrace-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-D-RNTI
                                           CRITICALITY ignore TYPE D-RNTI
                                                                                                                  PRESENCE optional
      }|
     ID id-TraceReference
                                           CRITICALITY ignore TYPE TraceReference
                                                                                                                  PRESENCE mandatory
    },
   . . .
}
IurDeactivateTrace-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
```

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-- MBMS ATTACH COMMAND MBMSAttachCommand ::= SEQUENCE { { {MBMSAttachCommand-IEs } }, protocolIEs ProtocolIE-Container protocolExtensions ProtocolExtensionContainer {{MBMSAttachCommand-Extensions}} OPTIONAL. . . . } MBMSAttachCommand-IEs RNSAP-PROTOCOL-IES ::= { ID id-MBMS-Bearer-Service-List CRITICALITY ignore TYPE MBMS-Bearer-Service-List PRESENCE mandatory } { ID id-UE-State CRITICALITY ignore TYPE UE-State PRESENCE optional}, . . . } MBMSAttachCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . 3 - --- MBMS DETACH COMMAND - -\*\*\*\*\*\*\* MBMSDetachCommand ::= SEQUENCE { {{MBMSDetachCommand-IEs}}, protocolIEs ProtocolIE-Container ProtocolExtensionContainer {{MBMSDetachCommand-Extensions}} protocolExtensions OPTIONAL, . . . } MBMSDetachCommand-IEs RNSAP-PROTOCOL-IES ::= { ID id-MBMS-Bearer-Service-List CRITICALITY iqnore TYPE MBMS-Bearer-Service-List PRESENCE mandatory} { ID id-UE-State CRITICALITY ignore TYPE UE-State PRESENCE optional}, . . . } MBMSDetachCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . - --- DIRECT INFORMATION TRANSFER - -DirectInformationTransfer ::= SEQUENCE { {{DirectInformationTransfer-IEs}}, protocolIEs ProtocolIE-Container protocolExtensions ProtocolExtensionContainer {{DirectInformationTransfer-Extensions}} OPTIONAL, . . . }

DirectInformationTransfer-IEs RNSAP-PROTOCOL-IES ::= { ID id-RNC-ID CRITICALITY ignore TYPE RNC-ID PRESENCE mandatory} ID id-ProvidedInformation CRITICALITY ignore TYPE ProvidedInformation PRESENCE mandatory } , . . . } DirectInformationTransfer-Extensions RNSAP-PROTOCOL-EXTENSION ::= { { ID id-Extended-RNC-ID CRITICALITY reject EXTENSION Extended-RNC-ID PRESENCE optional }, \*\*\*\*\*\*\*\*\*\*\* \_ \_ -- ENHANCED RELOCATION REQUEST \*\*\*\*\* EnhancedRelocationRequest ::= SEQUENCE { protocolIEs ProtocolIE-Container {{EnhancedRelocationRequest-IEs}}, ProtocolExtensionContainer {{EnhancedRelocationRequest-Extensions}} protocolExtensions OPTIONAL, . . . } EnhancedRelocationRequest-IEs RNSAP-PROTOCOL-IES ::= { ID id-Cause CRITICALITY reject TYPE Cause PRESENCE mandatory ID id-Permanent-NAS-UE-Identity CRITICALITY reject TYPE Permanent-NAS-UE-Identity PRESENCE mandatory } { ID id-SRNC-ID CRITICALITY reject TYPE RNC-ID PRESENCE optional } | -- This IE shall be present if the Relocation type IE is set to "UE involved in relocation of SRNS" --ID id-Extended-SRNC-ID CRITICALITY reject TYPE Extended-RNC-ID PRESENCE optional } ID id-S-RNTI CRITICALITY reject TYPE S-RNTI PRESENCE mandatory }| ID id-RANAP-EnhancedRelocationInformationRequest CRITICALITY reject TYPE RANAP-EnhancedRelocationInformationRequest PRESENCE mandatory }, . . . EnhancedRelocationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= { {ID id-Extended-S-RNTI CRITICALITY reject EXTENSION Extended-RNTI PRESENCE optional }, . . . } - --- ENHANCED RELOCATION RESPONSE EnhancedRelocationResponse ::= SEQUENCE { protocolIEs ProtocolIE-Container {{EnhancedRelocationResponse-IEs}}, ProtocolExtensionContainer {{EnhancedRelocationResponse-Extensions}} protocolExtensions OPTIONAL, . . . } EnhancedRelocationResponse-IEs RNSAP-PROTOCOL-IES ::= {

{ ID id-RANAP-EnhancedRelocationInformationResponse CRITICALITY ignore TYPE RANAP-EnhancedRelocationInformationResponse PRESENCE mandatory }, . . . EnhancedRelocationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . - -ENHANCED RELOCATION FAILURE - -\_ \_ EnhancedRelocationFailure ::= SEQUENCE { {{EnhancedRelocationFailure-IEs}}, protocolIEs ProtocolIE-Container ProtocolExtensionContainer {{EnhancedRelocationFailure-Extensions}} protocolExtensions OPTIONAL, . . . } EnhancedRelocationFailure-IEs RNSAP-PROTOCOL-IES ::= { ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory }| ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }, . . . } EnhancedRelocationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . - --- ENHANCED RELOCATION CANCEL - -EnhancedRelocationCancel ::= SEQUENCE { protocolIEs ProtocolIE-Container {{EnhancedRelocationCancel-IEs}}, ProtocolExtensionContainer {{EnhancedRelocationCancel-Extensions}} protocolExtensions OPTIONAL, . . . } EnhancedRelocationCancel-IEs RNSAP-PROTOCOL-IES ::= { { ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory }, . . . } EnhancedRelocationCancel-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . } \_ \_

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-- ENHANCED RELOCATION SIGNALLING TRANSFER EnhancedRelocationSignallingTransfer ::= SEQUENCE { protocolIEs {{EnhancedRelocationSignallingTransfer-IEs}}, ProtocolIE-Container ProtocolExtensionContainer {{EnhancedRelocationSignallingTransfer-Extensions}} protocolExtensions OPTIONAL, . . . } EnhancedRelocationSignallingTransfer-IEs RNSAP-PROTOCOL-IES ::= { { ID id-L3-Information CRITICALITY ignore TYPE L3-Information PRESENCE mandatory }, . . . } EnhancedRelocationSignallingTransfer-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . - -- -ENHANCED RELOCATION RELEASE - -EnhancedRelocationRelease ::= SEQUENCE { {{EnhancedRelocationRelease-IEs}}, protocolIEs ProtocolIE-Container protocolExtensions ProtocolExtensionContainer {{EnhancedRelocationRelease-Extensions}} OPTIONAL, . . . } EnhancedRelocationRelease-IEs RNSAP-PROTOCOL-IES ::= { { ID id-Released-CN-Domain CRITICALITY ignore TYPE Released-CN-Domain PRESENCE mandatory }, . . . EnhancedRelocationRelease-Extensions RNSAP-PROTOCOL-EXTENSION ::= { \_ \_ - --- MBSFN MCCH INFORMATION MBSFNMCCHInformation ::= SEOUENCE { protocolIEs ProtocolIE-Container {{MBSFNMCCHInformation-IEs}}, ProtocolExtensionContainer {{MBSFNMCCHInformation-Extensions}} protocolExtensions OPTIONAL, . . . } MBSFNMCCHInformation-IEs RNSAP-PROTOCOL-IES ::= { { ID id-MBSFN-Cluster-Identity CRITICALITY ignore TYPE MBSFN-Cluster-Identity PRESENCE mandatory}

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ID id-MCCH-Message-List CRITICALITY TYPE MCCH-Message-List PRESENCE mandatory } reject ID id-CFN CRITICALITY reiect TYPE CFN PRESENCE mandatorv}| ID id-MCCH-Configuration-Info CRITICALITY ignore TYPE MCCH-Configuration-Info PRESENCE optional}| { ID id-MBSFN-Scheduling-Transmission-Time-Interval-Info-List CRITICALITY TYPE MBSFN-Scheduling-Transmission-Time-Intervalignore Info-List PRESENCE optional }, . . . 3 MBSFNMCCHInformation-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . - --- SECONDARY UL FREQUENCY REPORT - -SecondaryULFrequencyReport ::= SEQUENCE { protocolIEs ProtocolIE-Container {{SecondaryULFrequencyReport-IEs}}, ProtocolExtensionContainer {{SecondaryULFrequencyReport-Extensions}} protocolExtensions OPTIONAL, . . . SecondaryULFrequencyReport-IEs RNSAP-PROTOCOL-IES ::= { { ID id-ActivationInformation CRITICALITY iqnore TYPE ActivationInformation PRESENCE mandatory }, . . . } SecondaryULFrequencyReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . . - --- SECONDARY UL FREOUENCY UPDATE INDICATION - -SecondaryULFrequencyUpdateIndication ::= SEQUENCE { {{SecondaryULFrequencyUpdateIndication-IEs}}, protocolIEs ProtocolIE-Container ProtocolExtensionContainer {{SecondaryULFrequencyUpdateIndication-Extensions}} protocolExtensions OPTIONAL, . . . SecondaryULFrequencyUpdateIndication-IEs RNSAP-PROTOCOL-IES ::= { { ID id-ActivationInformation CRITICALITY PRESENCE mandatory }, iqnore TYPE ActivationInformation . . . } SecondaryULFrequencyUpdateIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= { . . .

```
_ _
  ENHANCED RELOCATION RESOURCE REQUEST
- -
- -
     EnhancedRelocationResourceRequest ::= SEQUENCE {
                                                 EnhancedRelocationResourceRequest-IEs}},
   protocolIEs
                       ProtocolIE-Container
                       ProtocolExtensionContainer
                                               {{ EnhancedRelocationResourceRequest-Extensions}}
   protocolExtensions
                                                                                               OPTIONAL,
   . . .
}
EnhancedRelocationResourceRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-IMSI
                                 CRITICALITY reject TYPE IMSI
                                                                              PRESENCE optional }
     ID id-SourceID
                                 CRITICALITY ignore TYPE SourceID
                                                                              PRESENCE mandatory
                                 CRITICALITY reject TYPE TargetID
                                                                              PRESENCE mandatory
     ID id-TargetID
     ID id-ClassmarkInformation2
                                                                              PRESENCE mandatory }
                                  CRITICALITY reject TYPE ClassmarkInformation2
     ID id-ClassmarkInformation3
                                  CRITICALITY ignore TYPE ClassmarkInformation3
                                                                              PRESENCE mandatory }
    ID id-SpeechVersion
                                  CRITICALITY ignore TYPE SpeechVersion
                                                                              PRESENCE mandatory },
   . . .
EnhancedRelocationResourceRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    - -
-- ENHANCED RELOCATION RESOURCE RESPONSE
EnhancedRelocationResourceResponse ::= SEQUENCE {
   protocolIEs
              ProtocolIE-Container
                                                {EnhancedRelocationResourceResponse-IEs}},
   protocolExtensions
                     ProtocolExtensionContainer {{EnhancedRelocationResourceResponse-Extensions}}
                                                                                               OPTIONAL,
   . . .
}
EnhancedRelocationResourceResponse-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI
                                     CRITICALITY ignore TYPE D-RNTI
                                                                                   PRESENCE mandatory }
     ID id-L3-Information
                                     CRITICALITY ignore TYPE L3-Information
                                                                                   PRESENCE mandatory }
     ID id-Cell-Capacity-Class-Value
                                     CRITICALITY ignore TYPE Cell-Capacity-Class-Value
                                                                                   PRESENCE optional }|
                                     CRITICALITY ignore TYPE LoadValue
                                                                                   PRESENCE optional },
   { ID id-LoadValue
   . . .
EnhancedRelocationResourceResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    _ _
-- ENHANCED RELOCATION RESOURCE FAILURE
```

```
EnhancedRelocationResourceFailure ::= SEQUENCE {
                     ProtocolIE-Container
                                               {{EnhancedRelocationResourceFailure-IEs}},
   protocolIEs
                                              {{EnhancedRelocationResourceFailure-Extensions}}
                     ProtocolExtensionContainer
   protocolExtensions
                                                                                             OPTIONAL,
   . . .
}
EnhancedRelocationResourceFailure-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-Cause
                    CRITICALITY ignore TYPE Cause
                                                                                PRESENCE mandatory } |
    ID id-Cell-Capacity-Class-Value CRITICALITY ignore TYPE Cell-Capacity-Class-Value
                                                                                PRESENCE optional }|
   { ID id-LoadValue
                                 CRITICALITY ignore TYPE LoadValue
                                                                                PRESENCE optional },
   . . .
}
EnhancedRelocationResourceFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
}
   ***********
- -
-- ENHANCED RELOCATION RESOURCE RELEASE COMMAND
EnhancedRelocationResourceReleaseCommand ::= SEQUENCE {
   protocolIEs
                    ProtocolIE-Container
                                               {{EnhancedRelocationResourceReleaseCommand-IEs}},
                      ProtocolExtensionContainer {{EnhancedRelocationResourceReleaseCommand-Extensions}} OPTIONAL,
   protocolExtensions
   . . .
}
EnhancedRelocationResourceReleaseCommand-IEs RNSAP-PROTOCOL-IES ::= {
                                                 PRESENCE mandatory },
   { ID id-Cause
                   CRITICALITY ignore TYPE Cause
   . . .
}
EnhancedRelocationResourceReleaseCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
  - -
-- ENHANCED RELOCATION RESOURCE RELEASE COMPLETE
EnhancedRelocationResourceReleaseComplete ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                          {{EnhancedRelocationResourceReleaseComplete-IEs}},
   protocolExtensions
                    ProtocolExtensionContainer {{EnhancedRelocationResourceReleaseComplete-Extensions}}
                                                                                                    OPTIONAL,
   . . .
}
```

```
EnhancedRelocationResourceReleaseComplete-IEs RNSAP-PROTOCOL-IES ::= {
```

```
. . .
}
EnhancedRelocationResourceReleaseComplete-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
}
  ******
- -
-- PRIVATE MESSAGE
- -
  **********
PrivateMessage ::= SEQUENCE {
   privateIEs
              PrivateIE-Container {{PrivateMessage-IEs}},
   . . .
}
PrivateMessage-IEs RNSAP-PRIVATE-IES ::= {
   . . .
     - -
-- INFORMATION TRANSFER CONTROL REQUEST
- -
InformationTransferControlRequest ::= SEQUENCE {
                 ProtocolIE-Container
                                               {{ InformationTransferControlRequest-IEs}},
   protocolIEs
                     ProtocolExtensionContainer
                                               {{ InformationTransferControlRequest-Extensions}}
   protocolExtensions
                                                                                               OPTIONAL,
   . . .
}
InformationTransferControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-Control-Type-InformationTransferControlReg CRITICALITY ignore TYPE Control-Type-InformationTransferControlReg
                                                                                                            PRESENCE mandatory
},
   . . .
InformationTransferControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
Control-Type-InformationTransferControlReg ::= CHOICE {
   suspension
                 Suspension-Control-Type,
   resume
                   Resume-Control-Type,
   . . .
}
Suspension-Control-Type ::= SEQUENCE {
   controlled-Object-Scope Controlled-Object-Scope,
   iE-Extensions
                       ProtocolExtensionContainer {{ Suspension-Control-Type-ExtIEs}},
   . . .
```

```
}
Suspension-Control-Type-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
Resume-Control-Type ::= SEQUENCE {
    controlled-Object-Scope,
    iE-Extensions ProtocolExtensionContainer { { Resume-Control-Type-ExtIEs}},
    ...
}
Resume-Control-Type-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

END

# 9.3.4 Information Element Definitions

```
- -
-- Information Element Definitions
- -
RNSAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-IEs (2) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
IMPORTS
   maxCellSIB110rSIB12,
   maxNrOfFACHs,
   maxIBSEG,
   maxCellsMeas,
   maxNoOfDSCHs,
   maxNoOfUSCHs,
   maxNrOfDCHs,
   maxNrOfDL-Codes,
   maxNrOfDLTs,
   maxNrOfDLTsLCR,
   maxNrOfDPCHs,
   maxNrOfDPCHs768,
   maxNrOfDPCHsLCR,
   maxNrOfEDCH-HARQ-PO-QUANTSTEPs,
   maxNrOfEDCHHARQProcesses2msEDCH,
   maxNrOfBits-MACe-PDU-non-scheduled,
   maxNrOfEDPCCH-PO-QUANTSTEPs,
   maxNrOfRefETFCI-PO-QUANTSTEPs,
```

maxNrOfRefETFCIs, maxNrOfErrors. maxNrOfFDDNeighboursPerRNC, maxNrOfMACcshSDU-Length, maxNrOfNeighbouringRNCs, maxNrOfTDDNeighboursPerRNC, maxNrOfLCRTDDNeighboursPerRNC, maxNrOfTS, maxNrOfTsLCR, maxNrOfULTs, maxNrOfULTsLCR, maxNrOfGSMNeighboursPerRNC, maxRateMatching, maxNrOfPoints. maxNoOfRB, maxNrOfRLs, maxNrOfTFCs, maxNrOfTFs, maxCTFC, maxRNCinURA-1, maxNrOfSCCPCHs, maxNrOfSCCPCHs768, maxTGPS, maxTTI-Count, maxNoGPSTypes, maxNoSat, maxNrOfActiveMBMSServices, maxNrOfCells, maxNrOfSNAs, maxNrOfHARQProc, maxNrOfHSSCCHCodes, maxNrOfMACdFlows, maxNrOfMACdFlows-1, maxNrOfMACdPDUSize, maxNrOfMBMSL3, maxNrOfMCCHMessages, maxNrOfEDCHMACdFlows, maxNrOfEDCHMACdFlows-1, maxNrOfEDCHMACdFlowsLCR, maxNrOfEDCHMACdFlowsLCR-1, maxNrOfMBMSServices, maxNrOfPDUIndexes, maxNrOfPDUIndexes-1, maxNrOfPrioQueues, maxNrOfPrioOueues-1, maxNrOfSatAlmanac-maxNoSat, maxNrOfGERANSI, maxNrofSigSegERGHICH-1, maxNrOfUEs, maxNrOfAddFreq, maxNrOfCellsPerFreq, maxNoOfLogicalChannels, maxNrOfRefBetas, maxNrOfEAGCHCodes,

maxNrOfHS-DSCHTBSs, maxNrOfHS-DSCHTBSs-HS-SCCHless. maxHS-PDSCHCodeNrComp-1, maxNrOfEHICHCodes, maxGANSSSat. maxNoGANSS, maxSqnType, maxNrOfBroadcastPLMNs, maxHSDPAFrequency, maxHSDPAFrequency-1, maxFrequencyinCell, maxFrequencyinCell-1, maxGANSSSatAlmanac, maxGANSSClockMod. maxNrOfEDCHRLs, maxNrOfEUTRANeighboursPerRNC, maxEARFCN, maxNrOfPreconfiguredNeighbours, maxNrOfHSDSCH-1, maxNrOfHSDSCH, maxGANSS-1, maxlengthMBMSconcatservlists, 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, maxNrOfEDCH-1, maxNrOfDCHMeasurementOccasionPatternSequence, maxNrOfULCarriersLCR-1, maxNrOfCellIds, maxNrOfRAIs, maxNrOfLAIs, maxNrOfExtendedNeighbouringRNCs, maxFreqBandsTDD, maxSCPICHCell, maxSCPICHCell-1, id-Allowed-Rate-Information, id-AntennaColocationIndicator, id-BindingID, id-Cell-Capacity-Class-Value, id-CellCapabilityContainer-FDD, id-CellCapabilityContainer-TDD, id-CellCapabilityContainer-TDD-LCR, id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information, id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response, id-Counting-Information, id-CoverageIndicator,

id-DPC-Mode-Change-SupportIndicator,

id-E-DCH-Minimum-Set-E-TFCIValidityIndicator,

id-E-RGCH-E-HICH-ChannelisationCodeValidityIndicator, id-Extended-Round-Trip-Time-Value, id-ExtendedPropagationDelay, id-Extended-SRNC-ID, id-Extended-RNC-ID. id-ExtendedAffectedUEInformationForMBMS, id-Additional-Associated-Secondary-CPICH, id-MIMO-withfourtransmitantennas-ActivationIndicator, id-MIMO-withfourtransmitantennas-ModeIndicator, id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator, id-DualStream-MIMO-withfourtransmitantennas-ModeIndicator, id-GERAN-Cell-Capability, id-GERAN-Classmark. id-Guaranteed-Rate-Information. id-HARO-Preamble-Mode-Activation-Indicator, id-HCS-Prio, id-Inter-Frequency-Cell-Information, id-Load-Value, id-Load-Value-IncrDecrThres, id-Neighbouring-GSM-CellInformation, id-Neighbouring-UMTS-CellInformationItem, id-neighbouring-LCR-TDD-CellInformation, id-NRT-Load-Information-Value, id-NRT-Load-Information-Value-IncrDecrThres, id-OnModification, id-Received-Total-Wideband-Power-Value, id-Received-Total-Wideband-Power-Value-IncrDecrThres, id-RT-Load-Value, id-RT-Load-Value-IncrDecrThres, id-SFNSFNMeasurementThresholdInformation, id-SNA-Information, id-TrafficClass, id-Transmitted-Carrier-Power-Value, id-Transmitted-Carrier-Power-Value-IncrDecrThres, id-TUTRANGPSMeasurementThresholdInformation, id-UL-Timeslot-ISCP-Value, id-UL-Timeslot-ISCP-Value-IncrDecrThres, maxNrOfLevels, maxNrOfMeasNCell, maxNrOfMeasNCell-1, id-MessageStructure, id-RestrictionStateIndicator, id-Rx-Timing-Deviation-Value-LCR, id-TransportLayerAddress, id-Transmission-Mode-Information, id-TypeOfError, id-Angle-Of-Arrival-Value-LCR, id-IPDL-TDD-ParametersLCR, id-DSCH-InitialWindowSize, id-Maximum-DL-Power-TimeslotLCR-InformationItem, id-MBMS-Bearer-Service-Full-Address, id-MBMS-Neighbouring-Cell-Information, id-MBMS-RLC-Sequence-Number-Information, id-MBSFN-Cluster-Identity,

id-MBSFN-Scheduling-Transmission-Time-Interval-Info-List, id-MCCH-Configuration-Info, id-MCCH-Message-List. id-Minimum-DL-Power-TimeslotLCR-InformationItem, id-HS-SICH-Reception-Quality, id-HS-SICH-Reception-Quality-Measurement-Value, id-HS-PDSCH-Code-Change-Grant, id-HS-PDSCH-Code-Change-Indicator, id-ExtendedGSMCellIndividualOffset, id-Unidirectional-DCH-Indicator, id-RTLoadValue, id-RLC-Sequence-Number, id-NRTLoadInformationValue. id-Satellite-Almanac-Information-ExtItem, id-TnlOos. id-UpPTSInterferenceValue, id-NACC-Related-Data, id-HARO-Preamble-Mode, id-User-Plane-Congestion-Fields-Inclusion, id-FrequencyBandIndicator, id-PLCCH-Information-UL-TimeslotLCR-Info, id-CellCapabilityContainer-TDD768, id-hSSCCH-TDD-Specific-InfoList-Response768, id-hSPDSCH-TDD-Specific-InfoList-Response768, id-Rx-Timing-Deviation-Value-768, id-UEMeasurementValueTransmittedPowerList768, id-UEMeasurementValueTimeslotISCPList768, id-E-DCH-PowerOffset-for-SchedulingInfo, id-Rx-Timing-Deviation-Value-ext, id-TrCH-SrcStatisticsDescr, id-eDCH-MACdFlow-Retransmission-Timer-LCR, id-MIMO-ActivationIndicator, id-MIMO-InformationResponse, id-MIMO-Mode-Indicator, id-MIMO-N-M-Ratio, id-SixteenQAM-UL-Operation-Indicator, id-E-AGCH-Table-Choice, id-E-TFCI-Boost-Information, id-E-DPDCH-PowerInterpolation, id-HSDSCH-MACdPDUSizeFormat, id-MaximumMACdPDU-SizeExtended, id-GANSS-Common-Data. id-GANSS-Information, id-GANSS-Generic-Data, id-TUTRANGANSSMeasurementThresholdInformation, id-TUTRANGANSSMeasurementValueInformation, id-HARO-MemoryPartitioningInfoExtForMIMO, id-Ext-Reference-E-TFCI-PO, id-Ext-Max-Bits-MACe-PDU-non-scheduled, id-Multiple-PLMN-List, id-TransportBearerNotSetupIndicator, id-TransportBearerNotReguestedIndicator, id-UARFCNforNt, id-LCRTDD-uplink-Physical-Channel-Capability,

id-number-Of-Supported-Carriers, id-HSSICH-SIRTarget, id-HSSICH-TPC-StepSize. id-tSN-Length, id-HS-SICH-ID-Extension, id-multipleFreg-HSPDSCH-InformationList-ResponseTDDLCR, id-multicarrier-number, id-UpPCH-InformationList-LCRTDD, id-UpPCH-InformationItem-LCRTDD, id-Max-UE-DTX-Cycle, id-Default-Serving-Grant-in-DTX-Cycle2, id-SixtyfourQAM-UsageAllowedIndicator, id-SixtyfourOAM-DL-UsageIndicator, id-UE-Capabilities-Info, id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory, id-Continuous-Packet-Connectivity-HS-SCCH-Less-Deactivate-Indicator, id-E-DCH-MACdPDUSizeFormat, id-E-PUCH-PowerControlGAP, id-MaximumNumber-Of-Retransmission-For-SchedulingInfo-LCRTDD, id-E-DCH-RetransmissionTimer-For-SchedulingInfo-LCRTDD, id-HSDSCH-TBSizeTableIndicator, id-E-DCH-DL-Control-Channel-Change-Information, id-E-DCH-DL-Control-Channel-Grant-Information, id-DGANSS-Corrections-Reg, id-UE-with-enhanced-HS-SCCH-support-indicator, id-EnhancedHSServingCC-Abort, id-GANSS-Time-ID, id-GANSS-AddIonoModelReg, id-GANSS-EarthOrientParaReg, id-GANSS-AddNavigationModelsReq, id-GANSS-AddUTCModelsReg, id-GANSS-AuxInfoReq, 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-Secondary-Serving-Cell-List, id-MinimumReducedE-DPDCH-GainFactor, id-E-AGCH-UE-Inactivity-Monitor-Threshold, id-MACes-Maximum-Bitrate-LCR, id-MultiCarrier-HSDSCH-Physical-Layer-Category, id-MIMO-SFMode-For-HSPDSCHDualStream, id-MIMO-SFMode-Supported-For-HSPDSCHDualStream, id-MIMO-ReferenceSignal-InformationListLCR,

id-DL-RLC-PDU-Size-Format, id-UE-SupportIndicatorExtension, id-power-offset-for-S-CPICH-for-MIMO. id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator, id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas, id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator, id-Dual-Band-Secondary-Serving-Cell-List, id-Single-Stream-MIMO-ActivationIndicator. id-Single-Stream-MIMO-Mode-Indicator, id-Additional-EDCH-Preconfiguration-Information, id-MulticellEDCH-Information, id-EDCH-Indicator, id-DiversityMode, id-TransmitDiversityIndicator, id-NonCellSpecificTxDiversity, id-CellCapabilityContainerExtension-FDD, id-HSDSCH-Physical-Layer-Category, id-TS0-HS-PDSCH-Indication-LCR, id-UE-TS0-CapabilityLCR, id-DGNSS-ValidityPeriod, id-UE-AggregateMaximumBitRate-Enforcement-Indicator, id-Out-of-Sychronization-Window, id-MulticellEDCH-RL-SpecificInformation, id-Continuous-Packet-Connectivity-DTX-DRX-Information, id-Additional-E-DCH-Non-Serving-RL-Preconfiguration-Setup, id-Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList, id-OrdinalNumberOfFrequency, id-Multicell-EDCH-Restriction, id-CellListValidityIndicator, id-completeAlmanacProvided, id-ganss-Delta-T, id-CellCapabilityContainerExtension-TDD-LCR, id-SNPL-Carrier-Group-Indicator, id-HS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext, id-Measurement-Power-Offset, id-Multi-Carrier-E-DCH-LCRTDD-PhysicalLayerCategory, id-Neighbouring-UMTS-CellInformationExtensionItem, id-EventH, id-UMTS-Cells-Info, id-ANRReportIndication, id-ANR-Cell-Information, id-Affected-HSDSCH-Serving-Cell-List, id-Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order, id-UE-RF-Band-CapabilityLCR, id-UE-transmission-power-headroom, id-Multiflow-Information, id-Multiflow-Reconfiguration, id-Multiflow-OrdinalNumberOfFrequency, id-UL-MIMO-Information, id-UL-MIMO-Reconfiguration, id-UL-MIMO-DL-Control-Channel-Information, id-SixtyfourOAM-UL-Operation-Indicator,

id-Common-E-RGCH-Cell-Information

FROM RNSAP-Constants

```
Criticality,
    ProcedureID.
    ProtocolIE-ID,
    TransactionID,
    TriggeringMessage
FROM RNSAP-CommonDataTypes
    ProtocolIE-Single-Container{},
    ProtocolExtensionContainer{},
    RNSAP-PROTOCOL-IES,
    RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers;
-- A
AccessPointName
                  ::= OCTET STRING (SIZE (1..255))
AckNack-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
Ack-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in TS 25.213 [21] subclause 4.2.1
ActivationInformation ::= SEOUENCE (SIZE (1..maxNrOfEDCH-1)) OF ActivationInformationItem
ActivationInformationItem ::= SEQUENCE {
    uU-ActivationState Uu-ActivationState,
                                                    ProtocolExtensionContainer { { ActivationInformationItem-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
}
ActivationInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Active-MBMS-Bearer-Service-ListFDD ::= SEQUENCE (SIZE (1..maxNrOfActiveMBMSServices)) OF MBMS-Bearer-ServiceItemFDD
Active-MBMS-Bearer-Service-ListFDD-PFL ::= SEOUENCE (SIZE (1..maxNrOfActiveMBMSServices)) OF MBMS-Bearer-ServiceItemFDD-PFL
Active-MBMS-Bearer-Service-ListTDD ::= SEQUENCE (SIZE (1..maxNrOfActiveMBMSServices)) OF MBMS-Bearer-ServiceItemTDD
Active-MBMS-Bearer-Service-ListTDD-PFL ::= SEQUENCE (SIZE (1..maxNrOfActiveMBMSServices)) OF MBMS-Bearer-ServiceItemTDD-PFL
Active-Pattern-Sequence-Information ::= SEQUENCE {
    cMConfigurationChangeCFN
                                    CFN.
    transmission-Gap-Pattern-Sequence-Status Transmission-Gap-Pattern-Sequence-Status-List
                                                                                                  OPTIONAL,
                        ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
```

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Active-Pattern-Sequence-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Cell-Information-Response-RLAddList ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-Cell-Information-Response-RLAdd-
ItemIEs
Additional-EDCH-Cell-Information-Response-RLAdd-ItemIEs ::=SEQUENCE{
    additional-EDCH-FDD-Information-Response
                                                                    Additional-EDCH-FDD-Information-Response-ItemIEs
                                                                                                                         OPTIONAL,
    additional-EDCH-Serving-Cell-Change-Information-Response-RLAdd
                                                                         E-DCH-Serving-cell-change-informationResponse
                                                                                                                                 OPTIONAL,
                                    ProtocolExtensionContainer { { Additional-EDCH-Cell-Information-Response-RLAdd-ItemIEs-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Additional-EDCH-Cell-Information-Response-RLAdd-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Setup-Info ::=SEQUENCE{
    multicell-EDCH-Transport-Bearer-Mode
                                                                            Multicell-EDCH-Transport-Bearer-Mode,
    additional-EDCH-Cell-Information-Setup
                                                                             Additional-EDCH-Cell-Information-Setup,
                                    ProtocolExtensionContainer { { Additional-EDCH-Setup-Info-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Additional-EDCH-Setup-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
ANRReportIndication ::= SEQUENCE {
    pLMN-Identity
                        PLMN-Identity,
    13-Information
                        L3-Information,
    iE-Extensions
                       ProtocolExtensionContainer { {ANRReportIndication-ExtIEs} } OPTIONAL,
    . . .
ANRReportIndication-ExtIEs RNSAP-PROTOCOL-EXTENSION ::={
Multicell-EDCH-Transport-Bearer-Mode ::= ENUMERATED {
    separate-Iur-Transport-Bearer-Mode,
    uL-Flow-Multiplexing-Mode
}
Additional-EDCH-Cell-Information-Setup ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-FDD-Setup-Cell-Information
Additional-EDCH-FDD-Setup-Cell-Information ::=SEQUENCE{
    additional-EDCH-UL-DPCH-Information-Setup
                                                                             Additional-EDCH-UL-DPCH-Information-Setup,
    additional-EDCH-RL-Specific-Information-To-Setup
                                                                             Additional-EDCH-RL-Specific-Information-To-Setup-List,
    additional-EDCH-FDD-Information
                                                                             Additional-EDCH-FDD-Information
                                                                                                                  OPTIONAL,
    additional-EDCH-F-DPCH-Information-Setup
                                                                             Additional-EDCH-F-DPCH-Information,
    multicellEDCH-Information
                                                                             MulticellEDCH-Information
                                                                                                          OPTIONAL,
                                    ProtocolExtensionContainer { { Additional-EDCH-FDD-Setup-Cell-Information-ExtIEs } } OPTIONAL,
    iE-Extensions
```

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}
Additional-EDCH-FDD-Setup-Cell-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Additional-EDCH-UL-DPCH-Information-Setup
                                           ::=SEOUENCE{
    ul-ScramblingCode
                                            UL-ScramblingCode,
    ul-SIR-Target
                                            UL-SIR
                                                        OPTIONAL,
   iE-Extensions
                                    ProtocolExtensionContainer { { Additional-EDCH-UL-DPCH-Information-Setup-ExtIEs } } OPTIONAL,
    . . .
3
Additional-EDCH-UL-DPCH-Information-Setup-ExtIEs
                                                    RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-F-DPCH-Information ::=SEQUENCE{
    fdd-TPC-DownlinkStepSize
                                        FDD-TPC-DownlinkStepSize,
   limitedPowerIncrease
                                        LimitedPowerIncrease,
    innerLoopDLPCStatus
                                        InnerLoopDLPCStatus,
    f-DPCH-SlotFormatSupportRequest
                                        F-DPCH-SlotFormatSupportRequest
                                                                                OPTIONAL,
                                    ProtocolExtensionContainer { { Additional-EDCH-F-DPCH-Information-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
Additional-EDCH-F-DPCH-Information-ExtIEs
                                          RNSAP-PROTOCOL-EXTENSION ::=
    . . .
}
Additional-EDCH-RL-Specific-Information-To-Setup-List := SEQUENCE (SIZE (1.. maxNrOfEDCHRLs)) OF Additional-EDCH-RL-Specific-Information-To-
Setup-ItemIEs
Additional-EDCH-RL-Specific-Information-To-Setup-ItemIEs
                                                            ::=SEOUENCE{
    eDCH-Additional-RL-ID
                                        RL-ID,
    c-ID
                                        C-ID
                                                            OPTIONAL,
    firstRLS-indicator
                                        FirstRLS-Indicator,
    propagationDelay
                                        PropagationDelay
                                                                         OPTIONAL,
    initialDL-transmissionPower
                                        DL-Power
                                                                OPTIONAL,
    primaryCPICH-EcNo
                                        PrimaryCPICH-EcNo
                                                                     OPTIONAL,
    e-AGCH-PowerOffset
                                        E-AGCH-PowerOffset
                                                                                     OPTIONAL,
    e-RGCH-PowerOffset
                                        E-RGCH-PowerOffset
                                                                                     OPTIONAL,
    e-HICH-PowerOffset
                                        E-HICH-PowerOffset
                                                                                     OPTIONAL,
    additional-EDCH-MAC-d-Flows-Specific-Info-List
                                                        Additional-EDCH-MAC-d-Flows-Specific-Info-List
                                                                                                                  OPTIONAL,
                                                MulticellEDCH-RL-SpecificInformation OPTIONAL,
    multicellEDCH-RL-SpecificInformation
                                        ProtocolExtensionContainer { { Additional-EDCH-RL-Specific-Information-To-Setup-ItemIEs-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
```

Additional-EDCH-RL-Specific-Information-To-Setup-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

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::= SEQUENCE (SIZE (1.. maxNrOfEDCH-1)) OF Additional-EDCH-Cell-Information-To-Add-ItemIEs Additional-EDCH-Cell-Information-To-Add-List Additional-EDCH-Cell-Information-To-Add-ItemIEs::=SEQUENCE{ additional-EDCH-UL-DPCH-Information-Setup Additional-EDCH-UL-DPCH-Information-Addition, additional-EDCH-RL-Specific-Information-To-Add-List Additional-EDCH-RL-Specific-Information-To-Add-List, additional-EDCH-FDD-Information Additional-EDCH-FDD-Information OPTIONAL, multicellEDCH-Information MulticellEDCH-Information OPTIONAL, ProtocolExtensionContainer { { Additional-EDCH-Cell-Information-To-Add-ItemIEs-ExtIEs } } OPTIONAL. iE-Extensions . . . Additional-EDCH-Cell-Information-To-Add-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . Additional-EDCH-UL-DPCH-Information-Addition ::=SEOUENCE{ ul-SIR-Target UL-SIR. ProtocolExtensionContainer { { Additional-EDCH-UL-DPCH-Information-Addition-ExtIEs } } OPTIONAL, iE-Extensions . . . 3 Additional-EDCH-UL-DPCH-Information-Addition-Extles RNSAP-PROTOCOL-EXTENSION ::= { Additional-EDCH-RL-Specific-Information-To-Add-List := SEQUENCE (SIZE (1.. maxNrOfEDCHRLs)) OF Additional-EDCH-RL-Specific-Information-To-Add-ItemIEs Additional-EDCH-RL-Specific-Information-To-Add-ItemIEs ::=SEQUENCE{ eDCH-Additional-RL-ID RL-ID, c-ID C-ID, primaryCPICH-EcNo PrimaryCPICH-EcNo OPTIONAL, e-AGCH-PowerOffset E-AGCH-PowerOffset OPTIONAL, e-RGCH-PowerOffset E-RGCH-PowerOffset OPTIONAL, e-HICH-PowerOffset E-HICH-PowerOffset OPTIONAL, additional-EDCH-MAC-d-Flows-Specific-Info-List Additional-EDCH-MAC-d-Flows-Specific-Info-List OPTIONAL, multicellEDCH-RL-SpecificInformation MulticellEDCH-RL-SpecificInformation OPTIONAL, ProtocolExtensionContainer { { Additional-EDCH-RL-Specific-Information-To-Add-ItemIEs-ExtIEs } } OPTIONAL, iE-Extensions . . . Additional-EDCH-RL-Specific-Information-To-Add-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . } Additional-EDCH-RL-Specific-Information-To-Modify-List ::= SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF Additional-EDCH-RL-Specific-Information-To-Modify-ItemIEs Additional-EDCH-RL-Specific-Information-To-Modify-ItemIEs ::=SEQUENCE{ eDCH-Additional-RL-ID RL-ID, e-AGCH-PowerOffset E-AGCH-PowerOffset OPTIONAL, e-RGCH-PowerOffset E-RGCH-PowerOffset OPTIONAL, e-HICH-PowerOffset E-HICH-PowerOffset OPTIONAL, additional-EDCH-MAC-d-Flows-Specific-Info-List Additional-EDCH-MAC-d-Flows-Specific-Info-List OPTIONAL,

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multicellEDCH-RL-SpecificInformation
                                                 MulticellEDCH-RL-SpecificInformation
                                                                                              OPTIONAL,
    iE-Extensions
                                         ProtocolExtensionContainer { { Additional-EDCH-RL-Specific-Information-To-Modify-ItemIEs-ExtIEs } }
OPTIONAL.
    . . .
Additional-EDCH-RL-Specific-Information-To-Modify-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Additional-EDCH-FDD-Information ::=SEQUENCE{
    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-Min-Set-E-TFCI
                                                     E-TFCI
    OPTIONAL,
                                         ProtocolExtensionContainer { { Additional-EDCH-FDD-Information-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Additional-EDCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Additional-EDCH-MAC-d-Flows-Specific-Info-List ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF Additional-EDCH-MAC-d-Flows-Specific-Info
Additional-EDCH-MAC-d-Flows-Specific-Info ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     EDCH-MACdFlow-ID,
    bindingID
                                                     BindingID
    OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
    OPTIONAL,
                                                     ProtocolExtensionContainer { { Additional-EDCH-MAC-d-Flows-Specific-Info-ExtIEs } }
    iE-Extensions
        OPTIONAL,
    . . .
Additional-EDCH-MAC-d-Flows-Specific-Info-ExtIEs
                                                     RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Additional-EDCH-MAC-d-Flow-Specific-Information-Response-List::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF Additional-EDCH-MAC-d-Flows-Specific-
Info-Response
Additional-EDCH-MAC-d-Flows-Specific-Info-Response ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                             EDCH-MACdFlow-ID,
    bindingID
                                             BindingID
                                                                                                                                          OPTIONAL,
    transportLayerAddress
                                             TransportLayerAddress
                                                                                                                                          OPTIONAL,
    iE-Extensions
                                             ProtocolExtensionContainer { { Additional-EDCH-MAC-d-Flows-Specific-Info-Response-ExtIEs } }
    OPTIONAL,
    . . .
```

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} Additional-EDCH-MAC-d-Flows-Specific-Info-Response-Extles RNSAP-PROTOCOL-EXTENSION ::= { } Additional-EDCH-Cell-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-FDD-Information-Response-ItemIEs Additional-EDCH-FDD-Information-Response-ItemIEs ::=SEOUENCE{ eDCH-Additional-RL-Specific-Information-Response EDCH-Additional-RL-Specific-Information-Response-List, ProtocolExtensionContainer { { Additional-EDCH-FDD-Information-Response-ItemIEs-ExtIEs } } OPTIONAL, iE-Extensions . . . } Additional-EDCH-FDD-Information-Response-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { EDCH-Additional-RL-Specific-Information-Response-List := SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF EDCH-Additional-RL-Specific-Information-Response-ItemIEs ::=SEQUENCE{ EDCH-Additional-RL-Specific-Information-Response-ItemIEs eDCH-Additional-RL-ID RL-ID, received-total-wide-band-power Received-total-wide-band-power, dL-PowerBalancing-ActivationIndicator DL-PowerBalancing-ActivationIndicator OPTIONAL, rL-Set-ID RL-Set-ID, e-DCH-RL-Set-ID RL-Set-ID, eDCH-FDD-DL-ControlChannelInformation EDCH-FDD-DL-ControlChannelInformation, FDD-DL-CodeInformation, dl-CodeInformation additional-EDCH-MAC-d-Flow-Specific-Information-Response-List Additional-EDCH-MAC-d-Flow-Specific-Information-Response-List OPTIONAL, hARO-Process-Allocation-Scheduled-2ms-EDCH HARQ-Process-Allocation-2ms-EDCH OPTIONAL, maxUL-SIR UL-SIR, minUL-STR UL-SIR, MaximumAllowedULTxPower, maximumAllowedULTxPower maximumDL-power DL-Power, minimumDL-power DL-Power, primaryScramblingCode PrimaryScramblingCode OPTIONAL, uL-UARFCN UARFCN OPTIONAL, dL-UARFCN UARFCN OPTIONAL, PrimaryCPICH-Power, primaryCPICH-Power pC-Preamble PC-Preamble, primary-CPICH-Usage-For-Channel-Estimation Primary-CPICH-Usage-For-Channel-Estimation OPTIONAL, secondary-CPICH-Information Secondary-CPICH-Information OPTIONAL, f-DPCH-SlotFormat F-DPCH-SlotFormat OPTIONAL, ProtocolExtensionContainer { { EDCH-Additional-RL-Specific-Information-Response-ItemIEs-ExtIEs } } OPTIONAL, iE-Extensions . . .

EDCH-Additional-RL-Specific-Information-Response-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

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Additional-EDCH-Cell-Information-Response-RLReconf-List::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-FDD-Information-Response-RLReconf-Items

Additional-EDCH-FDD-Information-Response-RLReconf-Items::=SEQUENCE{ eDCH-Additional-RL-Specific-Information-Response EDCH-Additional-RL-Specific-Information-Response-List OPTIONAL, eDCH-Additional-RL-Specific-Modified-Information-Response EDCH-Additional-RL-Specific-Modified-Information-Response-List OPTIONAL, iE-Extensions ProtocolExtensionContainer { { Additional-EDCH-FDD-Information-Response-RLReconf-Items-ExtIEs } } OPTIONAL, Additional-EDCH-FDD-Information-Response-RLReconf-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { EDCH-Additional-RL-Specific-Modified-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF EDCH-Additional-RL-Specific-Modified-Information-Response-ItemIEs EDCH-Additional-RL-Specific-Modified-Information-Response-ItemIEs : :=SEOUENCE { eDCH-Additional-RL-ID RL-ID, dL-PowerBalancing-UpdatedIndicator DL-PowerBalancing-UpdatedIndicator OPTIONAL. eDCH-FDD-DL-ControlChannelInformation EDCH-FDD-DL-ControlChannelInformation OPTIONAL, additional-EDCH-MAC-d-Flow-Specific-Information-Response-List Additional-EDCH-MAC-d-Flow-Specific-Information-Response-List OPTIONAL, hARO-Process-Allocation-Scheduled-2ms-EDCH HARO-Process-Allocation-2ms-EDCH OPTIONAL, maxUL-SIR OPTIONAL, UL-SIR minUL-SIR UL-SIR OPTIONAL, maximumDL-power DL-Power OPTIONAL, minimumDL-power DL-Power OPTIONAL. primary-CPICH-Usage-For-Channel-Estimation Primary-CPICH-Usage-For-Channel-Estimation OPTIONAL, secondary-CPICH-Information-Change Secondary-CPICH-Information-Change OPTIONAL, f-DPCH-SlotFormat F-DPCH-SlotFormat OPTIONAL, ProtocolExtensionContainer { { EDCH-Additional-RL-Specific-Modified-Information-Response-ItemIEs-ExtIEs } } iE-Extensions OPTIONAL, . . . EDCH-Additional-RL-Specific-Modified-Information-Response-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . 3 Additional-EDCH-Cell-Information-ConfigurationChange-List := SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-ConfigurationChange-Info-ItemIEs Additional-EDCH-ConfigurationChange-Info-ItemIEs ::=SEOUENCE{ additional-EDCH-UL-DPCH-Information-Modify Additional-EDCH-UL-DPCH-Information-Modify OPTIONAL, additional-EDCH-RL-Specific-Information-To-Add Additional-EDCH-RL-Specific-Information-To-Add-List OPTIONAL, additional-EDCH-RL-Specific-Information-To-Modify Additional-EDCH-RL-Specific-Information-To-Modify-List OPTIONAL, additional-EDCH-FDD-Information-To-Modify Additional-EDCH-FDD-Information OPTIONAL, additional-EDCH-F-DPCH-Information-Modify Additional-EDCH-F-DPCH-Information OPTIONAL, multicellEDCH-Information MulticellEDCH-Information OPTIONAL, iE-Extensions ProtocolExtensionContainer { { Additional-EDCH-ConfigurationChange-Info-ItemIEs-ExtIEs } } OPTIONAL, . . .

```
Additional-EDCH-ConfigurationChange-Info-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Additional-EDCH-UL-DPCH-Information-Modify
                                                ::=SEOUENCE{
    ul-ScramblingCode
                                            UL-ScramblingCode
                                                                 OPTIONAL.
    ul-SIR-Target
                                            UL-SIR
                                                                 OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { Additional-EDCH-UL-DPCH-Information-Modify-ExtIEs } } OPTIONAL,
Additional-EDCH-UL-DPCH-Information-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Additional-EDCH-Cell-Information-Removal-List ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-Cell-Information-Removal-Info-ItemIEs
Additional-EDCH-Cell-Information-Removal-Info-ItemIEs ::=SEQUENCE{
    rL-on-Secondary-UL-Frequency
                                                             RL-on-Secondary-UL-Frequency,
    iE-Extensions
                                    ProtocolExtensionContainer { { Additional-EDCH-Cell-Information-Removal-Info-ItemIEs-ExtIEs } } OPTIONAL,
    . . .
}
Additional-EDCH-Cell-Information-Removal-Info-ItemIEs-ExtIEs
                                                                 RNSAP-PROTOCOL-EXTENSION ::=
    . . .
}
RL-on-Secondary-UL-Frequency ::= ENUMERATED
    remove,
    . . .
Additional-EDCH-FDD-Update-Information ::=SEQUENCE{
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                                     HARO-Process-Allocation-2ms-EDCH
                                                                                                                                         OPTIONAL.
    additional-EDCH-DL-Control-Channel-Change-Information
                                                                     Additional-EDCH-DL-Control-Channel-Change-Information-List
    OPTIONAL,
                                    ProtocolExtensionContainer { { Additional-EDCH-FDD-Update-Information-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Additional-EDCH-FDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Additional-EDCH-DL-Control-Channel-Change-Information-List := SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF Additional-EDCH-DL-Control-Channel-Change-
Info-ItemIEs
Additional-EDCH-DL-Control-Channel-Change-Info-ItemIEs ::=SEQUENCE{
    eDCH-Additional-RL-ID
                                        RL-ID,
    iE-Extensions
                                        ProtocolExtensionContainer { { Additional-EDCH-DL-Control-Channel-Change-Info-ItemIEs-ExtIEs } } OPTIONAL,
    . . .
```

```
Additional-EDCH-DL-Control-Channel-Change-Info-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
AdditionalPreferredFrequency ::= SEQUENCE (SIZE (1..maxNrOfAddFreq)) OF AdditionalPreferredFrequencyItem
AdditionalPreferredFrequencyItem ::= SEQUENCE {
    dL-UARFCN
                                   UARFCN,
    correspondingCells
                                   CorrespondingCells,
                                   ProtocolExtensionContainer { { AdditionalPreferredFrequencyItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
AdditionalPreferredFrequencyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
AdjustmentPeriod
                         ::= INTEGER(1..256)
-- Unit Frame
AffectedUEInformationForMBMS
                              ::= SEOUENCE (SIZE (1..maxNrOfUEs)) OF S-RNTI
AllocationRetentionPriority ::= SEQUENCE {
    priorityLevel
                               PriorityLevel,
    pre-emptionCapability
                               Pre-emptionCapability,
    pre-emptionVulnerability Pre-emptionVulnerability,
    iE-Extensions
                      ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
    . . .
AllocationRetentionPriority-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Allowed-Rate-Information ::= SEQUENCE
    allowed-UL-Rate
                           Allowed-Rate OPTIONAL,
    allowed-DL-Rate
                           Allowed-Rate OPTIONAL,
                           ProtocolExtensionContainer { {Allowed-Rate-Information-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
Allowed-Rate-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Allowed-Rate
                ::= INTEGER (1..maxNrOfTFs)
-- "1": TFI 0, "2": TFI 1, "3": TFI 2, ...
AllowedQueuingTime
                    ::= INTEGER (1..60)
-- seconds
```

```
AlphaValue
                            ::= INTEGER (0..8)
-- Actual value = Alpha / 8
AlternativeFormatReportingIndicator ::= ENUMERATED
   alternativeFormatAllowed,...
}
Angle-Of-Arrival-Value-LCR ::= SEQUENCE {
    aOA-LCR
                            AOA-LCR,
    aOA-LCR-Accuracy-Class AOA-LCR-Accuracy-Class,
    iE-Extensions
                            ProtocolExtensionContainer { {Angle-Of-Arrival-Value-LCR-ExtIEs} } OPTIONAL,
. . .
3
Angle-Of-Arrival-Value-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ANR-Cell-Information
                        ::= SEQUENCE
    rNC-ID
                                     RNC-ID,
    1AC
                                     LAC
                                                                 OPTIONAL,
    rAC
                                     RAC
                                                                 OPTIONAL,
    aNR-FDD-CellInformation
                                     ANR-FDD-CellInformation
                                                                  OPTIONAL,
    aNR-TDD-CellInformation
                                     ANR-TDD-CellInformation
                                                                 OPTIONAL.
    aNR-LCR-TDD-CellInformation
                                     ANR-LCR-TDD-CellInformation OPTIONAL,
    extended-RNC-ID
                                     Extended-RNC-ID
                                                                  OPTIONAL.
    iE-Extensions
                                     ProtocolExtensionContainer { { ANR-Cell-Information-ExtIEs } } OPTIONAL,
    . . .
ANR-Cell-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
ANR-FDD-CellInformation ::= SEQUENCE {
    primaryCPICH-Power
                                         PrimaryCPICH-Power
                                                                              OPTIONAL,
    txDiversityIndicator
                                         TxDiversityIndicator,
    sTTD-SupportIndicator
                                         STTD-SupportIndicator
                                                                              OPTIONAL,
    closedLoopMode1-SupportIndicator
                                         {\tt ClosedLoopModel-SupportIndicator}
                                                                              OPTIONAL,
    restrictionStateIndicator
                                         RestrictionStateIndicator
                                                                              OPTIONAL,
    dpc-ModeChangeSupportIndicator
                                         DPC-Mode-Change-SupportIndicator
                                                                              OPTIONAL,
    cellCapabilityContainerFDD
                                         CellCapabilityContainer-FDD
                                                                              OPTIONAL,
    sNA-Information
                                         SNA-Information
                                                                              OPTIONAL,
    frequencyBandIndicator
                                         FrequencyBandIndicator
                                                                              OPTIONAL.
    max-UE-DTX-Cycle
                                         Max-UE-DTX-Cycle
                                                                              OPTIONAL,
    aNR-Multiple-PLMN-List
                                         ANR-Multiple-PLMN-List
                                                                              OPTIONAL,
    secondaryServingCellList
                                         Secondary-Serving-Cell-List
                                                                              OPTIONAL,
    dualBandSecondaryServingCellList
                                         Secondary-Serving-Cell-List
                                                                              OPTIONAL,
    cellCapabilityContainerExtensionFDD CellCapabilityContainerExtension-FDD
                                                                                  OPTIONAL,
    iE-Extensions
                                         ProtocolExtensionContainer { { ANR-FDD-CellInformation-ExtIEs } } OPTIONAL,
    . . .
```

**ETSI** 

```
ANR-FDD-CellInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
ANR-TDD-CellInformation ::= SEQUENCE
    syncCase
                                     SyncCase,
    timeSlot
                                    TimeSlot
                                                                 OPTIONAL
    -- This IE shall be present if Sync Case = Case1 -- ,
    sCH-TimeSlot
                                     SCH-TimeSlot
                                                                 OPTIONAL
    -- This IE shall be present if Sync Case = Case2 -- ,
    sCTD-Indicator
                                     SCTD-Indicator,
    dPCHConstantValue
                                    DPCHConstantValue
                                                                 OPTIONAL,
    pCCPCH-Power
                                    PCCPCH-Power
                                                                 OPTIONAL.
    restrictionStateIndicator
                                     RestrictionStateIndicator OPTIONAL,
    cellCapabilityContainerTDD
                                     CellCapabilityContainer-TDD OPTIONAL,
    -- Applicable to 3.84Mcps TDD only
    cellCapabilityContainerTDD768
                                    CellCapabilityContainer-TDD768 OPTIONAL,
    -- Applicable to 7.68Mcps TDD only
    sNA-Information
                                     SNA-Information
                                                                 OPTIONAL,
    aNR-Multiple-PLMN-List
                                    ANR-Multiple-PLMN-List
                                                                 OPTIONAL,
    iE-Extensions
                                     ProtocolExtensionContainer { { ANR-TDD-CellInformation-ExtIEs } } OPTIONAL,
    . . .
ANR-TDD-CellInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
ANR-LCR-TDD-CellInformation ::= SEQUENCE {
    sCTD-Indicator
                                                 SCTD-Indicator,
    dPCHConstantValue
                                                 DPCHConstantValue
                                                                                              OPTIONAL,
    pCCPCH-Power
                                                 PCCPCH-Power
                                                                                              OPTIONAL,
    restrictionStateIndicator
                                                 RestrictionStateIndicator
                                                                                              OPTIONAL,
    cellCapabilityContainerTDD-LCR
                                                 CellCapabilityContainer-TDD-LCR
                                                                                              OPTIONAL,
    -- Applicable to 1.28Mcps TDD only
    sNA-Information
                                                 SNA-Information
                                                                                              OPTIONAL,
    aNR-Multiple-PLMN-List
                                                 ANR-Multiple-PLMN-List
                                                                                              OPTIONAL,
    cellCapabilityContainerExternsionTDD-LCR
                                                 CellCapabilityContainerExtension-TDD-LCR
                                                                                              OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { { ANR-LCR-TDD-CellInformation-ExtIEs } } OPTIONAL,
    . . .
ANR-LCR-TDD-CellInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
ANR-Multiple-PLMN-List ::= SEQUENCE {
    list-Of-PLMNs
                        List-Of-PLMNs
                                                                                      OPTIONAL,
    iE-Extensions
                        ProtocolExtensionContainer { { ANR-Multiple-PLMN-List-ExtIEs } } OPTIONAL,
    . . .
```

```
}
ANR-Multiple-PLMN-List-ExtIEs RNSAP-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,q,h,...}
AntennaColocationIndicator ::= ENUMERATED {
    co-located,
    . . .
}
-- B
BadSatellites ::= SEQUENCE {
    badSatelliteInformation
                                SEQUENCE (SIZE (1..maxNoSat)) OF
        SEQUENCE {
            badSAT-ID
                                        SAT-ID,
                                        ProtocolExtensionContainer { { BadSatelliteInformation-ExtIEs } }
            iE-Extensions
                                                                                                                   OPTIONAL,
            . . .
       },
    iE-Extensions
                                ProtocolExtensionContainer { { BadSatellites-ExtIEs } }
                                                                                              OPTIONAL,
    . . .
}
BadSatelliteInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
BadSatellites-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Band-Indicator ::= ENUMERATED {
    dcs1800Band,
    pcs1900Band,
    . . .
}
BCC ::= BIT STRING (SIZE (3))
BCCH-ARFCN ::= INTEGER (0..1023)
BetaCD ::= INTEGER (0..15)
BindingID
                       ::= OCTET STRING (SIZE (1..4,...))
-- If the Binding ID includes an UDP port, the UDP port is included in octet 1 and 2.
BLER
                       ::= INTEGER (-63..0)
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER
```

```
SCTD-Indicator ::= ENUMERATED {
    active.
    inactive
}
BSIC ::= SEQUENCE {
    nCC
                NCC.
    bCC
                BCC
}
BundlingModeIndicator ::= ENUMERATED ·
    bundling,
    no-bundling
}
BurstModeParameters ::= SEQUENCE {
    burstStart
                    INTEGER (0..15),
    burstLength
                    INTEGER (10..25),
    burstFreq
                    INTEGER (1..16),
    iE-Extensions
                                 ProtocolExtensionContainer { { BurstModeParameters-ExtIEs } }
                                                                                                     OPTIONAL,
    . . .
}
BurstModeParameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
-- C
Cause ::= CHOICE {
    radioNetwork
                        CauseRadioNetwork,
    transport
                         CauseTransport,
    protocol
                        CauseProtocol,
                        CauseMisc,
    misc
    . . .
ļ
CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    om-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, ul-scrambling-code-already-in-use, dl-radio-resources-not-available, ul-radio-resources-not-available, measurement-not-supported-for-the-object, combining-resources-not-available, combining-not-supported, reconfiguration-not-allowed, requested-configuration-not-supported, synchronisation-failure, requested-tx-diversity-mode-not-supported, measurement-temporaily-not-available, unspecified, invalid-CM-settings, reconfiguration-CFN-not-elapsed, number-of-DL-codes-not-supported, dedicated-transport-channel-type-not-supported, dl-shared-channel-type-not-supported, ul-shared-channel-type-not-supported, common-transport-channel-type-not-supported, ul-spreading-factor-not-supported, dl-spreading-factor-not-supported, cm-not-supported, transaction-not-supported-by-destination-node-b, rl-already-activated-or-alocated, . . . , number-of-UL-codes-not-supported, cell-reserved-for-operator-use, dpc-mode-change-not-supported, information-temporarily-not-available, information-provision-not-supported-for-the-object, power-balancing-status-not-compatible, delayed-activation-not-supported, rl-timing-adjustment-not-supported, unknown-RNTI, measurement-repetition-rate-not-compatible, ue-not-capable-of-support, f-dpch-not-supported, e-dch-not-supported, continuous-packet-connectivity-dtx-drx-operation-not-supported, continuous-packet-connectivity-hs-scch-less-operation-not-supported, mimo-not-supported, e-dch-tti2ms-not-supported, continuous-packet-connectivity-DTX-DRX-operation-not-available, continuous-packet-connectivity-UE-DTX-Cycle-not-available, mimo-not-available, sixteenQAM-UL-not-Supported,

hSDSCH-MACdPDU-SizeFormatNotSupported, f-dpch-slot-format-operation-not-supported, e-DCH-MACdPDU-SizeFormat-not-available. e-DPCCH-Power-Boosting-not-supported, trelocprep-expiry, directed-retry, no-Iu-CS-UP-relocation, reduce-load-in-serving-cell, relocation-cancelled, relocation-desirable-for-radio-reasons, resource-optimisation-relocation, time-critical-relocation, traffic-load-in-the-target-cell-higher-than-in-the-source-cell, sixtyfourOAM-DL-and-MIMO-Combined-not-available, multi-Cell-operation-not-available, multi-Cell-operation-not-supported, semi-Persistent-scheduling-not-supported, continuous-Packet-Connectivity-DRX-not-supported, continuous-Packet-Connectivity-DRX-not-available, enhanced-relocation-not-supported, relocation-not-supported-due-to-PUESBINE-feature, relocation-failure-in-target-RNC, relocation-target-not-allowed, requested-ciphering-and-or-integrity-protection-algorithms-not-supported. sixtyfourQAM-DL-and-MIMO-Combined-not-supported, tx-diversity-for-mimo-on-DL-control-channels-not-available, single-Stream-MIMO-not-supported, single-Stream-MIMO-not-available, multi-Cell-operation-with-MIMO-not-supported, multi-Cell-operation-with-MIMO-not-available, multi-Cell-EDCH-operation-not-supported, multi-Cell-EDCH-operation-not-available, multi-Cell-operation-with-Single-Stream-MIMO-not-supported, multi-Cell-operation-with-Single-Stream-MIMO-not-available, cellSpecificTxDiversitvHandlingForMultiCellOperationNotAvailable, cellSpecificTxDiversityHandlingForMultiCellOperationNotSupported, frequencySpecificCompressedModeNotAvailable, uL-CLTD-Operation-not-available, uL-CLTD-Operation-not-supported, mimo-withfourtransmitantennas-not-supported, mimo-withfourtransmitantennas-not-available, dualstream-mimo-withfourtransmitantennas-not-supported, dualstream-mimo-withfourtransmitantennas-not-available, multiflow-operation-not-supported, multiflow-operation-not-available, ul-SixtyfourQAM-not-available, ul-SixtvfourOAM-not-supported, ul-MIMO-Operation-not-available, uL-MIMO-Operation-not-supported, ul-MIMO-SixteenQAM-Operation-not-available, uL-MIMO-SixteenOAM-Operation-not-supported, ul-MIMO-SixtyfourOAM-Operation-not-available, uL-MIMO-SixtyfourQAM-Operation-not-supported

```
}
CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified,
    . . .
CellBased::= SEQUENCE {
    cellIdList
                        CellIdList,
                       ProtocolExtensionContainer { {CellBased-ExtIEs} } OPTIONAL,
    iE-Extensions
3
CellBased-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
CellIdList ::= SEQUENCE (SIZE (1..maxNrOfCellIds)) OF
    Cell-Id
Cell-Id
           ::= INTEGER (0..268435455)
CellCapabilityContainer-FDD ::= BIT STRING (SIZE (32))
-- First bit: Flexible Hard Split Support Indicator
-- Second bit: Delayed Activation Support Indicator
-- Third bit: HS-DSCH Support Indicator
-- Fourth bit: DSCH Support Indicator
-- Fifth bit: F-DPCH Support Indicator
-- sixth bit: E-DCH Support Indicator
-- Seventh bit: E-DCH TTI2ms Support Indicator
-- Eighth bit: E-DCH 2sf2and2sf4 and all inferior SFs Support Indicator
-- Ninth bit: E-DCH 2sf2 and all inferior SFs Support Indicator
-- Tenth bit: E-DCH 2sf4 and all inferior SFs Support Indicator
-- Eleventh bit: E-DCH sf4 and all inferior SFs Support Indicator
-- Twelveth bit: E-DCH sf8 and all inferior SFs Support Indicator
-- Thirteenth bit: E-DCH HARO IR Combining Support Indicator
-- Fourteenth bit: E-DCH HARQ Chase Combining Support Indicator
-- Fifteenth bit: Continuous Packet Connectivity DTX-DRX Support Indicator
-- Sixteenth bit: Continuous Packet Connectivity HS-SCCH less Support Indicator
-- Seventeenth bit: MIMO Support Indicator
-- Eighteenth bit: SixteenQAM UL Support Indicator
-- Nineteenth bit: Flexible MAC-d PDU Size Support Indicator
-- Twentieth bit: F-DPCH Slot Format Support Indicator
-- Twentyfirst bit: SixtyfourQAM DL Support Indicator
-- Twentysecond bit: Flexible E-DCH MAC-d PDU Size Support Indicator
-- Twentythird bit: E-DPCCH Power Boosting Support Indicator
-- Twentyfourth bit: SixtyfourQAM DL and MIMO Combined Support Indicator
-- Twentyfifth bit: Multi Cell Support Indicator Support Indicator
-- Twentysixth bit: MBMS Support Indicator
-- Twentyseventh bit: DRNS Support STTD on DL ctrl ch when the RL is in MIMO P-CPICH + S-CPICH cell
-- Twentyeighth bit: Dual Band Support Indicator
-- Twentyninth bit: Single Stream MIMO Support Indicator
```

- -- Thirtieth bit: Preferred Precoding Weight Set Restriction 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.

CellCapabilityContainerExtension-FDD ::= BIT STRING (SIZE (128))

- -- First bit: Cell Specific Tx Diversity Handling For Multi Cell Operation Support Indicator
- -- Second bit: Multi Cell and MIMO Support Indicator
- -- Third bit: Multi Cell and Single Stream MIMO Support Indicator
- -- Fourth bit: Multi Cell E-DCH Support Indicator
- -- Fifth bit: Separate Iub Transport Bearer Support Indicator
- -- Sixth bit: E-DCH UL Flow Multiplexing Support Indicator
- -- Seventh to eleventh bit: Maximum No of HSDPA Frequencies Support Indicator
- -- Twelfth bit: Dual Band and MIMO Support Indicator
- -- Thirteenth bit: 3 or more carrier HSDPA and MIMO Single Band Support Indicator
- -- Fourteenth bit: 3 or more carrier HSDPA and MIMO Dual Band Support Indicator
- -- Fifteenth bit : Dual Band and Single Stream MIMO Support Indicator
- -- Sixteenth bit : 3 or more carrier HSDPA and Single Stream MIMO Single Band Support Indicator
- -- Seventeenth bit : 3 or more carrier HSDPA and Single Stream MIMO Dual Band Support Indicator
- -- Eighteenth bit: Frequency specific Compressed Mode Support Indicator
- -- Nineteenth bit: UL CLTD Capability
- -- Twentieth to twenty-second bit: Supported MIMO transmit antennas (N).
- -- Twenty-third bit: MIMO with N transmit antennas Capability Adjacent-carrier.
- -- Twenty-fourth bit: MIMO with N transmit antennas Capability Dual Band/Dual Band.
- -- Twenty-fifth bit: Multi Cell and MIMO with N transmit antennas Capability Adjacent-carrier.
- -- Twenty-sixth bit: Multi Cell and MIMO with N transmit antennas Capability Dual Band/Dual Band.
- -- Twenty-seventh bit: HSPA 3 or more Carrier and MIMO with N transmit antennas Capability Adjacent-carrier.
- -- Twenty-eighth bit: HSPA 3 or more Carrier and MIMO with N transmit antennas Capability Dual Band/Dual Band.
- -- Twenty-ninth bit: Intra-site Multiflow
- -- Thirtieth bit: Inter-site Multiflow
- -- The thirty-first to thirty-third bits: Supported Multiflow configuration, where:
- -- value 0 indicates support for one frequency two cells
- -- value 1 indicates support for two frequencies three cells
- -- value 2 indicates support for two frequencies four cells
- -- values 3-7 are reserved for future use.
- -- Thirty-fourth bit: Multiflow and MIMO
- -- Thirty-fifth bit: Cell Specific Tx Diversity Handling For Multiflow Cell Operation
- -- Thirty-sixth bit: Multiflow and single stream MIMO
- -- Thirty-seventh bit: UL 64QAM Capability
- -- Thirty-eighth bit: UL MIMO Capability
- -- Thirty-ninth bit: UL MIMO and 16QAM Capability
- -- Fourtieth bit: UL MIMO and 64QAM Capability
- -- Fourty-first bit: Common E-RGCH 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.

CellCapabilityContainer-TDD ::= BIT STRING (SIZE (32))

- -- First bit: Delayed Activation Support Indicator
- -- Second bit: HS-DSCH Support Indicator
- -- Third bit: DSCH Support Indicator
- -- The fourth bit: Flexible MAC-d PDU Size Support Indicator
- -- Fifth bit: MBMS 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.

CellCapabilityContainer-TDD-LCR ::= BIT STRING (SIZE (32))

```
-- First bit: Delayed Activation Support Indicator
```

- -- Second bit: HS-DSCH Support Indicator
- -- Third bit: DSCH Support Indicator
- -- The fourth bit: Flexible MAC-d PDU Size 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.

CellCapabilityContainerExtension-TDD-LCR ::= BIT STRING (SIZE (32))

- -- First bit: Multi-Carrier E-DCH Operation Support Indicator
- -- Second bit: Separate Iur Transport Bearer Support Indicator
- -- Third bit: E-DCH UL flow Multiplexing 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.

CellCapabilityContainer-TDD768 ::= BIT STRING (SIZE (32))

- -- First bit: Delayed Activation Support Indicator
- -- Second bit: HS-DSCH Support Indicator
- -- Third bit: DSCH Support Indicator
- -- The fourth bit: Flexible MAC-d PDU Size 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.

```
C-ID ::= INTEGER (0..65535)
```

```
CCTrCH-ID ::= INTEGER (0..15)
```

```
CellIndividualOffset := INTEGER (-20..20)
```

```
CellListValidityIndicator ::= ENUMERATED {
    ignoreSecondaryServingCellList,
    ignoreDualBandSecondaryServingCellList,
    ignoreBoth
```

```
ı
```

```
l
```

```
CellParameterID ::= INTEGER (0..127,...)
```

```
CellPortionID ::= INTEGER (0..63,...)
```

```
CellPortionLCRID ::= INTEGER (0..255,...)
```

CFN ::= INTEGER (0..255)

```
CGI ::= SEQUENCE {
```

```
CI CI,
```

iE-Extensions ProtocolExtensionContainer { {CGI-ExtIEs} } OPTIONAL

```
}
```

```
LAI-EXTIES RNSAP-PROTOCOL-EXTENSION ::= {
```

```
CGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
ChannelCodingType ::= ENUMERATED {
    no-codingTDD,
    convolutional-coding,
    turbo-coding,
    . . .
}
ChipOffset
                       ::= INTEGER (0..38399)
CI
                    ::= OCTET STRING (SIZE (2))
ClassmarkInformation2
                                ::= OCTET STRING
ClassmarkInformation3
                                ::= OCTET STRING
ClosedLoopMode1-SupportIndicator
                                    ::= ENUMERATED
    closedLoop-Mode1-Supported,
    closedLoop-Mode1-not-Supported
}
Closedlooptimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
    . . .
}
CodingRate ::= ENUMERATED {
    half,
    third.
    . . .
}
CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass
                                             TUTRANGPSAccuracyClass,
    ...,
    tUTRANGANSSMeasurementAccuracyClass
                                             TUTRANGANSSAccuracyClass
}
CommonMeasurementType ::= ENUMERATED {
    uTRAN-GPS-timing-of-cell-frames-for-UE-Positioning,
    sFN-SFN-observerd-time-difference,
    load.
    transmitted-carrier-power,
    received-total-wide-band-power,
    uplink-timeslot-iscp,
    ...,
    rT-load,
    nRT-load-Information,
```

```
upPTSInterference,
    uTRAN-GANSS-timing-of-cell-frames-for-UE-Positioning
-- For measurements on the Iur-g interface, only load, RT Load and NRT Load information are requested.
CommonMeasurementValue ::= CHOICE {
    tUTRANGPSMeasurementValueInformation
                                            TUTRANGPSMeasurementValueInformation,
    sFNSFNMeasurementValueInformation
                                            SFNSFNMeasurementValueInformation,
    loadValue
                                            LoadValue,
    transmittedCarrierPowerValue
                                            INTEGER(0..100),
    receivedTotalWideBandPowerValue
                                            INTEGER(0..621),
    uplinkTimeslotISCPValue
                                            UL-TimeslotISCP,
    . . . .
    extension-CommonMeasurementValue
                                            Extension-CommonMeasurementValue
                                     ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementValueIE }}
Extension-CommonMeasurementValue
Extension-CommonMeasurementValueIE RNSAP-PROTOCOL-IES ::= {
    { ID id-RTLoadValue
                                                         CRITICALITY ignore TYPE RTLoadValue
        PRESENCE mandatory } |
    { ID id-NRTLoadInformationValue
                                                         CRITICALITY ignore TYPE NRTLoadInformationValue
    PRESENCE mandatory }|
    { ID id-UpPTSInterferenceValue
                                                         CRITICALITY reject TYPE UpPTSInterferenceValue
    PRESENCE mandatory } |
    { ID id-TUTRANGANSSMeasurementValueInformation
                                                         CRITICALITY reject TYPE TUTRANGANSSMeasurementValueInformation PRESENCE mandatory }
}
-- For measurements on the Iur-g interface, only load, RT Load and NRT Load values are reported.
CommonMeasurementValueInformation ::= CHOICE {
                                CommonMeasurementAvailable,
    measurementAvailable
    measurementnotAvailable
                                NULL
}
CommonMeasurementAvailable::= SEOUENCE {
    commonMeasurementValue
                                CommonMeasurementValue,
                                    ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs } }
    iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
CommonMeasurementAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
CongestionCause ::= ENUMERATED
    uTRAN-dynamic-resources,
    uTRAN-semistatic-resources,
    . . .
CommonTransportChannelResourcesInitialisationNotRequired ::= ENUMERATED
    not-Required
```

Common-EDCH-MAC-d-Flow-Specific-InformationFDD ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem

```
Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem ::= SEQUENCE {
    common-EDCH-MACdFlow-ID
                                                     EDCH-MACdFlow-ID,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                     MaxNr-Retransmissions-EDCH,
    eDCH-HARO-PO-FDD
                                                     E-DCH-HARO-PO-FDD,
    eDCH-MACdFlow-Multiplexing-List
                                                     E-DCH-MACdFlow-Multiplexing-List
                                                                                                                          OPTIONAL,
    common-E-DCHLogicalChannelInformation
                                                     Common-E-DCH-LogicalChannelInformation,
                                                     ProtocolExtensionContainer { { Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem-ExtIEs} }
    iE-Extensions
                OPTIONAL,
    . . .
Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Common-EDCH-MAC-d-Flow-Specific-InformationLCR ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlowsLCR)) OF Common-EDCH-MAC-d-Flow-Specific-
InformationItemLCR
Common-EDCH-MAC-d-Flow-Specific-InformationItemLCR ::= SEQUENCE {
    common-EDCH-MACdFlow-ID-LCR
                                                     EDCH-MACdFlow-ID-LCR,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                     MaxNr-Retransmissions-EDCH,
    eDCH-HARO-PO-TDD
                                                     E-DCH-HARO-PO-TDD,
                                                     E-DCH-MACdFlow-Multiplexing-List
    eDCH-MACdFlow-Multiplexing-List
                                                                                                                          OPTIONAL,
    common-E-DCHLogicalChannelInformation
                                                     Common-E-DCH-LogicalChannelInformation,
                                                     ProtocolExtensionContainer { { Common-EDCH-MAC-d-Flow-Specific-InformationItemLCR-ExtIEs} }
    iE-Extensions
                OPTIONAL,
    . . .
Common-EDCH-MAC-d-Flow-Specific-InformationItemLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Common-E-DCH-LogicalChannelInformation ::= SEQUENCE (SIZE (1..maxNoOfLogicalChannels)) OF Common-E-DCH-LogicalChannelInformationItem
Common-E-DCH-LogicalChannelInformationItem ::= SEQUENCE {
    logicalChannelId
                                    LogicalChannelID,
    maximumMACdPDU-SizeExtended
                                    MAC-PDU-SizeExtended
                                    ProtocolExtensionContainer { { Common-E-DCH-LogicalChannelInformationItem-ExtIEs } }
    iE-Extensions
    OPTIONAL.
    . . .
Common-E-DCH-LogicalChannelInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
Common-EDCH-Support-Indicator ::= NULL
```

```
Common-E-RGCH-Cell-Information ::= CHOICE {
    deActivation
                                            Common-E-RGCH-De-Activation.
    common-E-RGCH-Cell-Info
                                            Common-E-RGCH-Cell-Info,
    . . .
3
Common-E-RGCH-Cell-Info ::= SEOUENCE {
    eRGCH-ChannelisationCode
                                            FDD-DL-ChannelisationCodeNumber,
    eRGCH-SignatureSequence
                                            ERGCH-SignatureSequence,
    serving-Grant-Value
                                            E-Serving-Grant-Value
                                                                                 OPTIONAL,
    . . .
٦
Common-E-RGCH-De-Activation ::= NULL
CompleteAlmanacProvided ::= BOOLEAN
Continuous-Packet-Connectivity-DTX-DRX-Information ::= SEQUENCE {
                                                 UE-DTX-DRX-Offset,
    uE-DTX-DRX-Offset
   enabling-Delay
                                                 Enabling-Delay,
    dTX-Information
                                                DTX-Information,
    dRX-Information
                                                DRX-Information
                                                                                         OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { { Continuous-Packet-Connectivity-DTX-DRX-Information-ExtIEs } }
       OPTIONAL,
    . . .
Continuous-Packet-Connectivity-DTX-DRX-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Continuous-Packet-Connectivity-DTX-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,
                                                 ProtocolExtensionContainer { { Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify-ExtIEs
    iE-Extensions
} }
           OPTIONAL,
    . . .
Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Continuous-Packet-Connectivity-HS-SCCH-Less-Information ::= SEQUENCE (SIZE (1..maxNrOfHS-DSCHTBSs-HS-SCCHless)) OF Continuous-Packet-Connectivity-
HS-SCCH-Less-InformationItem
Continuous-Packet-Connectivity-HS-SCCH-Less-InformationItem ::= SEQUENCE
    transport-Block-Size-Index
                                            Transport-Block-Size-Index,
    hSPDSCH-Second-Code-Support
                                            HSPDSCH-Second-Code-Support,
    iE-Extensions
                                            ProtocolExtensionContainer { { Continuous-Packet-Connectivity-HS-SCCH-Less-InformationItem-ExtIEs } }
           OPTIONAL,
```

```
. . .
}
Continuous-Packet-Connectivity-HS-SCCH-Less-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response ::= SEQUENCE {
    hSPDSCH-First-Code-Index
                                            HSPDSCH-First-Code-Index,
    hSPDSCH-Second-Code-Index
                                            HSPDSCH-Second-Code-Index
                                                                                      OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response-ExtIEs
} }
            OPTIONAL,
    . . .
Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
CorrespondingCells ::= SEQUENCE (SIZE (1..maxNrOfCellsPerFreq)) OF C-ID
CoverageIndicator ::= ENUMERATED {
    overlap,
    covers,
    containedIn,
    . . .
CPC-Information ::= SEQUENCE {
    continuous-Packet-Connectivity-DTX-DRX-Information
                                                                             Continuous-Packet-Connectivity-DTX-DRX-Information
            OPTIONAL,
    continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify
                                                                             Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify
       OPTIONAL,
    continuous-Packet-Connectivity-HS-SCCH-Less-Information
                                                                             Continuous-Packet-Connectivity-HS-SCCH-Less-Information
        OPTIONAL,
                                                                              ProtocolExtensionContainer { { CPC-Information-ExtIEs} }
    iE-Extensions
        OPTIONAL,
    . . .
}
CPC-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Deactivate-Indicator
                                                                                      CRITICALITY reject
                                                                                                                                  EXTENSION
Continuous-Packet-Connectivity-HS-SCCH-less-Deactivate-Indicator
                                                                             PRESENCE optional },
    . . .
}
CPC-RecoveryReport ::= ENUMERATED {
    initiated,
    . . .
}
```

```
Continuous-Packet-Connectivity-HS-SCCH-less-Deactivate-Indicator ::= NULL
Counting-Information ::= SEOUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Counting-Information-List
Counting-Information-List ::= SEQUENCE {
    c-ID
                                         C-ID,
    counting-Result
                                         Counting-Result,
                                         ProtocolExtensionContainer { { Counting-Information-List-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Counting-Information-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Counting-Result ::= INTEGER (0..63)
CRC-Size
                        ::= ENUMERATED {
    v0,
    v8,
    v12,
    v16,
    v24,
    . . .
CriticalityDiagnostics ::= SEQUENCE {
    procedureID
                                     ProcedureID
                                                             OPTIONAL,
                                     TriggeringMessage
    triggeringMessage
                                                             OPTIONAL,
                                     Criticality
    procedureCriticality
                                                             OPTIONAL,
    transactionID
                                    TransactionID
                                                             OPTIONAL,
    iEsCriticalityDiagnostics
                                     CriticalityDiagnostics-IE-List OPTIONAL,
                                     ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
CriticalityDiagnostics-ExtIEs RNSAP-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 } } OPTIONAL,
        iE-Extensions
        . . .
CriticalityDiagnostics-IE-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ID id-MessageStructure
                                CRITICALITY ignore
                                                         EXTENSION MessageStructure
                                                                                          PRESENCE optional
   ID id-TypeOfError
                                CRITICALITY ignore
                                                         EXTENSION TypeOfError
                                                                                          PRESENCE mandatory
                                                                                                                    },
    . . .
```

```
}
MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
    SEQUENCE
        iE-ID
                                ProtocolIE-ID,
                                RepetitionNumber1
        repetitionNumber
                                                         OPTIONAL,
        iE-Extensions
                                ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
        . . .
MessageStructure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
CN-CS-DomainIdentifier ::= SEQUENCE {
                        PLMN-Identity,
    pLMN-Identity
    lac
                        LAC,
                        ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
    iE-Extensions
}
CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
CN-PS-DomainIdentifier ::= SEQUENCE {
                        PLMN-Identity,
    pLMN-Identity
    lac
                        LAC,
    rAC
                        RAC,
    iE-Extensions
                        ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs } } OPTIONAL
}
CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
l
CNDomainType
                ::= ENUMERATED
    cs-domain,
    ps-domain,
    i-care,
    . . .
-- See in TS 25.331 [16]
CQI-DTX-Timer ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity}
    -- Unit subframe
ControlGAP ::= INTEGER (1..255)
CQI-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 TS 25.213 [21] subclause 4.2.1
```

```
CQI-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
C-RNTI
                        ::= INTEGER (0..65535)
CodeRate ::= INTEGER (0..63)
CodeRate-short ::= INTEGER (0..10)
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
                                                                     NULT
                                                                                 OPTIONAL,
                                                                     ProtocolExtensionContainer { { CPC-InformationLCR-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
CPC-InformationLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
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,
                                    ProtocolExtensionContainer { { ContinuousPacketConnectivity-DRX-InformationLCR-ExtIEs } }
   iE-Extensions
   OPTIONAL,
    . . .
ContinuousPacketConnectivity-DRX-InformationLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
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-Cvcle-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 RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext CRITICALITY ignore EXTENSION Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext
    PRESENCE optional },
    . . .
```

```
}
E-AGCH-DRX-Information-LCR ::= CHOICE {
    sameAsHS-SCCH
                    NULL,
    e-AGCH-DRX-Parameters E-AGCH-DRX-Parameters.
    . . .
E-AGCH-DRX-Parameters ::= SEQUENCE {
    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 RNSAP-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,...}
    -- Unit subframe
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,
    iE-Extensions
                                                ProtocolExtensionContainer { { ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR-ExtIEs }
                OPTIONAL,
    . . .
ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
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 RNSAP-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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
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 RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-HS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext CRITICALITY ignore EXTENSION Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext
    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 ::= SEQUENCE {
    e-AGCH-UE-DRX-Cvcle-LCR
                                                     UE-DRX-Cvcle-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,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-AGCH-DRX-Parameters-Response-ExtIEs } } OPTIONAL,
    . . .
E-AGCH-DRX-Parameters-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
Controlled-Object-Scope ::= SEQUENCE{
    rNC-ID
                                             RNC-ID.
    extended-RNC-ID
                                             Extended-RNC-ID OPTIONAL,
    multiple-PLMN-List
                                             Multiple-PLMN-List OPTIONAL,
    umts-cell-Info
                                             UMTS-Cells-Info-List OPTIONAL,
                                             ProtocolExtensionContainer { {Controlled-Object-Scope-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Controlled-Object-Scope-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
۱
-- D
DATA-ID ::= INTEGER (0..3)
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,
    LOAWE
    dCH-SpecificInformationList
                                         DCH-Specific-FDD-InformationList,
    iE-Extensions
                                         ProtocolExtensionContainer { {DCH-FDD-InformationItem-ExtIEs} } OPTIONAL,
    . . .
DCH-FDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlQos
                            CRITICALITY
                                             ignore
                                                         EXTENSION
                                                                     Tnl0os
                                                                                  PRESENCE
                                                                                              optional
                                                                                                            },
    . . .
DCH-MeasurementOccasion-Information ::= SEQUENCE (SIZE (1.. maxNrOfDCHMeasurementOccasionPatternSequence)) OF DchMeasurementOccasionInformation-
Item
DchMeasurementOccasionInformation-Item ::= SEQUENCE {
    pattern-Sequence-Identifier
                                                 Pattern-Sequence-Identifier,
    status-Flag
                                                 Status-Flag,
                                                                 Measurement-Occasion-Pattern-Sequence-parameters
    measurement-Occasion-Pattern-Sequence-parameters
                                                                                                                                          OPTIONAL,
                                                 ProtocolExtensionContainer { { DCH-MeasurementOccasion-Information-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
DCH-MeasurementOccasion-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
}
Measurement-Occasion-Pattern-Sequence-parameters ::= SEQUENCE {
    measurement-Occasion-Pattern-Sequence-parameters-k
                                                                          INTEGER(1..9),
```

```
measurement-Occasion-Pattern-Sequence-parameters-offset
                                                                         INTEGER(0..511),
    measurement-Occasion-Pattern-Sequence-parameters-M-Length
                                                                         INTEGER(1..512),
    measurement-Occasion-Pattern-Sequence-parameters-Timeslot-Bitmap
                                                                         BIT STRING (SIZE (7)).
    iE-Extensions
                                ProtocolExtensionContainer { { Measurement-Occasion-Pattern-Sequence-parameters-ExtIEs } } OPTIONAL,
    . . .
Measurement-Occasion-Pattern-Sequence-parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-MeasurementType-Indicator ::= BIT STRING (SIZE (5))
DCH-Specific-FDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item
DCH-Specific-FDD-Item ::=
                           SEQUENCE {
    dCH-ID
                                        DCH-ID,
    trCH-SrcStatisticsDescr
                                        TrCH-SrcStatisticsDescr,
    ul-transportFormatSet
                                        TransportFormatSet,
    dl-transportFormatSet
                                        TransportFormatSet,
    ul-BLER
                                        BLER,
    dl-BLER
                                        BLER,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
                                        FrameHandlingPriority,
    frameHandlingPriority
    gE-Selector
                                        OE-Selector,
    dRACControl
                                        DRACControl,
                                        ProtocolExtensionContainer { {DCH-FDD-SpecificItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
DCH-FDD-SpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Guaranteed-Rate-Information
                                            CRITICALITY ignore EXTENSION Guaranteed-Rate-Information
                                                                                                                  PRESENCE optional
                                                                                                                                         }|
      ID id-TrafficClass
                                            CRITICALITY ignore EXTENSION TrafficClass PRESENCE mandatory }
                                            CRITICALITY reject EXTENSION Unidirectional-DCH-Indicator
                                                                                                                  PRESENCE optional
     ID id-Unidirectional-DCH-Indicator
                                                                                                                                         }.
    . . .
}
DCH-Indicator-For-E-DCH-HSDPA-Operation ::= ENUMERATED {
    dch-not-present
}
DCH-ID
                        ::= INTEGER (0..255)
DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem
DCH-InformationResponseItem ::= SEQUENCE {
    dCH-ID
                                DCH-ID,
    bindingID
                                BindingID
                                                         OPTIONAL,
    transportLayerAddress
                                TransportLayerAddress
                                                        OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { {DCH-InformationResponseItem-ExtIEs } } OPTIONAL,
    . . .
```

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```
DCH-InformationResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Allowed-Rate-Information
                                                CRITICALITY ignore EXTENSION Allowed-Rate-Information
                                                                                                                                         PRESENCE
optional
          }|
    { ID id-TransportBearerNotSetupIndicator CRITICALITY ignore EXTENSION TransportBearerNotSetupIndicator
                                                                                                                         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,
                                        ProtocolExtensionContainer { {DCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                                                                                         },
    { ID id-TnlQos
                                        CRITICALITY
                                                                     EXTENSION
                                                                                TnlQos
                                                                                             PRESENCE
                                                                                                          optional
                                                        ignore
    . . .
}
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, -- UL CCTrCH in which the DCH is mapped
    dl-cCTrCH-ID
                                        CCTrCH-ID, -- DL CCTrCH in which the DCH is mapped
    trCH-SrcStatisticsDescr
                                        TrCH-SrcStatisticsDescr,
    ul-transportFormatSet
                                        TransportFormatSet,
    dl-transportFormatSet
                                        TransportFormatSet,
   ul-BLER
                                        BLER,
    dl-BLER
                                        BLER,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
    frameHandlingPriority
                                        FrameHandlingPriority,
    qE-Selector
                                        OE-Selector
                                                            OPTIONAL,
    -- This IE shall be present if DCH is part of set of Co-ordinated DCHs
                                        ProtocolExtensionContainer { {DCH-Specific-TDD-Item-ExtIEs} } OPTIONAL,
    iE-Extensions
DCH-Specific-TDD-Item-Extles RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Guaranteed-Rate-Information
                                            CRITICALITY ignore EXTENSION Guaranteed-Rate-Information
                                                                                                                  PRESENCE optional
                                                                                                                                         }|
      ID id-TrafficClass
                                            CRITICALITY ignore EXTENSION TrafficClass PRESENCE mandatory }
     ID id-Unidirectional-DCH-Indicator
                                            CRITICALITY reject EXTENSION Unidirectional-DCH-Indicator
                                                                                                                  PRESENCE optional
                                                                                                                                         }.
}
DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
```

```
transmitted-code-power,
    rSCP.
    rx-timing-deviation,
    round-trip-time,
    . . . ,
    rx-timing-deviation-LCR,
    angle-Of-Arrival-LCR,
    hs-sich-guality,
    rx-timing-deviation-768,
    rx-timing-deviation-ext,
    ue-transmission-power-headroom
۱
DedicatedMeasurementValue ::= CHOICE {
    sIR-Value
                        SIR-Value,
    sIR-ErrorValue
                            SIR-Error-Value,
    transmittedCodePowerValue Transmitted-Code-Power-Value,
                        RSCP-Value, -- TDD only
    rSCP
    rxTimingDeviationValue Rx-Timing-Deviation-Value, -- 3.84Mcps TDD only
    roundTripTime
                        Round-Trip-Time-Value, -- FDD only
    . . . ,
    extension-DedicatedMeasurementValue
                                            Extension-DedicatedMeasurementValue
Extension-DedicatedMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-DedicatedMeasurementValueIE }}
Extension-DedicatedMeasurementValueIE RNSAP-PROTOCOL-IES ::= {
      ID id-Rx-Timing-Deviation-Value-LCR
                                                CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR
                                                                                                                  PRESENCE mandatory
      ID id-Angle-Of-Arrival-Value-LCR
                                                CRITICALITY reject TYPE Angle-Of-Arrival-Value-LCR
                                                                                                                  PRESENCE mandatory
      ID id-HS-SICH-Reception-Quality
                                                CRITICALITY reject TYPE HS-SICH-Reception-Quality-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-ext
                                                CRITICALITY reject TYPE Rx-Timing-Deviation-Value-ext
                                                                                                                  PRESENCE mandatory
      ID id-Extended-Round-Trip-Time-Value
                                                CRITICALITY reject TYPE Extended-Round-Trip-Time-Value
                                                                                                                  PRESENCE mandatory }
     ID id-UE-transmission-power-headroom
                                                CRITICALITY reject TYPE UE-transmission-power-headroom-Value
                                                                                                                  PRESENCE mandatory },
    . . .
DedicatedMeasurementValueInformation ::= CHOICE {
    measurementAvailable
                                DedicatedMeasurementAvailable,
    measurementnotAvailable
                                DedicatedMeasurementnotAvailable
}
DedicatedMeasurementAvailable::= SEQUENCE {
    dedicatedmeasurementValue
                                    DedicatedMeasurementValue,
    CFN
                                    CFN
                                                            OPTIONAL,
    ie-Extensions
                                    ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs } }
                                                                                                                          OPTIONAL,
    . . .
DedicatedMeasurementAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

DedicatedMeasurementnotAvailable ::= NULL DelayedActivation ::= CHOICE { cfn CFN, separate-indication NULL 3 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 iE-Extensions ProtocolExtensionContainer { { Activate-Info-ExtIEs } } OPTIONAL, . . . ٦ Activate-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-ExtendedPropagationDelay CRITICALITY ignore EXTENSION ExtendedPropagationDelay PRESENCE optional }. . . . } Deactivate-Info ::= SEQUENCE { deactivation-type Execution-Type, ProtocolExtensionContainer { { Deactivate-Info-ExtIEs } } iE-Extensions OPTIONAL, . . . } Deactivate-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . Execution-Type ::= CHOICE { synchronised CFN, unsynchronised NULL } DeltaSIR ::= INTEGER (0..30) -- Step 0.1 dB, Range 0..3 dB. DGANSSCorrections ::= SEQUENCE { dGANSS-ReferenceTime INTEGER(0..119), dGANSS-Information SEQUENCE (SIZE (1..maxSgnType)) OF SEQUENCE { gANSS-SignalId GANSS-Signal-ID OPTIONAL, gANSS-StatusHealth GANSS-StatusHealth, -- The following IE shall be present if the StatusHealth IE value is not equal to "no data" or "invalid data" dGANSS-SignalInformation SEQUENCE (SIZE (1..maxGANSSSat)) OF SEQUENCE { satId INTEGER(0..63),

```
qANSS-iod
                                             BIT STRING (SIZE (10)),
            udre
                                             UDRE,
                                             INTEGER(-2047..2047),
            ganss-prc
            ganss-rrc
                                             INTEGER(-127..127),
            ie-Extensions
                                             ProtocolExtensionContainer { { DGANSS-SignalInformationItem-ExtIEs } } OPTIONAL,
            . . .
                                                                                                                       OPTIONAL,
                                         ProtocolExtensionContainer { { DGANSS-InformationItem-ExtIEs } }
        ie-Extensions
                                                                                                                       OPTIONAL,
        . . .
    },
                                     ProtocolExtensionContainer { { DGANSSCorrections-ExtIEs } }
    ie-Extensions
                                                                                                                       OPTIONAL,
    . . .
DGANSSCorrections-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
DGANSS-Corrections-Req ::= SEQUENCE {
    dGANSS-Signal-ID
                                         BIT STRING (SIZE (8)),
                                         ProtocolExtensionContainer { { DGANSS-Corrections-Req-ExtIEs } }
                                                                                                                       OPTIONAL,
    ie-Extensions
    . . .
DGANSS-Corrections-Reg-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-ID
                                CRITICALITY ignore EXTENSION
                                                                 GANSS-ID
                                                                                      PRESENCE
                                                                                                  optional},
    . . .
}
DGANSS-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
DGANSS-SignalInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-DGNSS-ValidityPeriod CRITICALITY ignore EXTENSION DGNSS-ValidityPeriod
                                                                                          PRESENCE
                                                                                                                       optional },
    . . .
}
DGANSSThreshold ::= SEOUENCE {
    pRCDeviation
                       PRCDeviation,
    . . .
DGNSS-ValidityPeriod ::=
                                     SEQUENCE {
    udreGrowthRate
                                         UDREGrowthRate,
```

```
udreValidityTime
                                                                                             UDREValidityTime,
         iE-Extensions
                                                                                              ProtocolExtensionContainer { { DGNSS-ValidityPeriod-ExtIEs } }
                                                                                                                                                                                                                                                                        OPTIONAL,
         . . .
DGNSS-ValidityPeriod-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
          . . .
}
DGPSCorrections ::= SEQUENCE {
         qPSTOW
                                                                                                       GPSTOW,
         qPS-Status-Health
                                                                                                       GPS-Status-Health,
         satellite-DGPSCorrections-Information
                                                                                                       SEQUENCE (SIZE (1..maxNoSat)) OF
                  SEQUENCE {
                           sAT-ID
                                                                                                                SAT-ID,
                           iode-dqps
                                                                                                                BIT STRING (SIZE (8)),
                           uDRE
                                                                                                                UDRE,
                           pRC
                                                                                                                PRC,
                           range-Correction-Rate
                                                                                                                Range-Correction-Rate,
                           iE-Extensions
                                                                                                                ProtocolExtensionContainer { { Satellite-DGPSCorrections-Information-ExtIEs } }
                                                                                                                                                                                                                                                                                                                             OPTIONAL,
                            . . .
                  },
                                                                                    ProtocolExtensionContainer { { DGPSCorrections-ExtIEs } }
         iE-Extensions
                                                                                                                                                                                                                                     OPTIONAL,
         . . .
Satellite-DGPSCorrections-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
         {ID id-DGNSS-ValidityPeriod CRITICALITY ignore EXTENSION DGNSS-ValidityPeriod
                                                                                                                                                                                                         PRESENCE optional},
         . . .
}
DGPSCorrections-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
         . . .
}
DGPSThreshold ::= SEQUENCE {
         pRCDeviation
                                                        PRCDeviation,
         iE-Extensions
                                                        ProtocolExtensionContainer { { DGPSThreshold-ExtIEs } }
                                                                                                                                                                                                     OPTIONAL,
         . . .
}
DGPSThreshold-ExtIEs RNSAP-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,v100,v1250,v1500,v1750,v2000,v2500,v3000,v3500,v4000,v4500,v5000,v7500,v100,v1250,v1500,v1500,v100,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1250,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v1000,v
  . . .
}
```

```
::= ENUMERATED {
DiversityControlField
    may,
    must.
    must-not
}
DiversityMode
                           ::= ENUMERATED {
   none,
    sTTD,
    closedLoopMode1,
    not-used-closedLoopMode2,
    . . .
٦
DL-DPCH-SlotFormat
                            ::= INTEGER (0..16,...)
DL-DPCH-TimingAdjustment ::= ENUMERATED {
    timing-advance,
    timing-delay
}
DL-Power
                        ::= INTEGER (-350..150)
-- Value = DL-Power / 10
-- Unit dB, Range -35dB .. +15dB, Step 0.1dB
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-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
                                        AdjustmentPeriod
                                                                OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
                                        ScaledAdjustmentRatio OPTIONAL,
    adiustmentRatio
    -- 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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-ReferencePowerInformationList
                                        ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem
DL-ReferencePowerInformationItem ::= SEQUENCE {
   rL-TD
                                RL-ID,
    dl-Reference-Power
                                DL-Power,
                                ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
```

```
DL-ReferencePowerInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-PowerBalancing-ActivationIndicator := ENUMERATED {
    dL-PowerBalancing-Activated
}
DL-PowerBalancing-UpdatedIndicator ::= ENUMERATED
    dL-PowerBalancing-Updated
DL-ReferencePowerInformation
                              ::= SEQUENCE {
    common-DL-ReferencePowerInformation
                                                DL-Power
                                                                 OPTIONAL.
    individual-DL-ReferencePowerInformation
                                                DL-ReferencePowerInformationList
                                                                                         OPTIONAL,
   iE-Extensions
                                                ProtocolExtensionContainer { { DL-ReferencePowerInformation-ExtIEs } } OPTIONAL,
    . . .
DL-ReferencePowerInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
D-RNTI
                        ::= INTEGER (0..1048575)
D-RNTI-ReleaseIndication ::= ENUMERATED {
    release-D-RNTI,
    not-release-D-RNTI
}
DL-ScramblingCode
                           ::= INTEGER (0..15)
DL-FrameType ::= ENUMERATED {
    typeA,
    typeB,
    . . .
}
DL-Timeslot-Information ::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem
DL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
   midambleShiftAndBurstType
                                    MidambleShiftAndBurstType,
    tFCI-Presence
                                    TFCI-Presence,
                                    TDD-DL-Code-Information,
    dL-Code-Information
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
}
DL-Timeslot-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
DL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTsLCR)) OF DL-TimeslotLCR-InformationItem
```

```
DL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR.
   midambleShiftLCR
                                            MidambleShiftLCR,
    tFCI-Presence
                                            TFCI-Presence.
    dL-Code-LCR-Information
                                        TDD-DL-Code-LCR-Information,
                                            ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs } }
    iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
}
DL-TimeslotLCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                                                                                                                 }|
    { ID id-Maximum-DL-Power-TimeslotLCR-InformationItem
                                                           CRITICALITY iqnore
                                                                                  EXTENSION DL-Power
                                                                                                                          PRESENCE optional
    -- Applicable to 1.28Mcps TDD only
    { ID id-Minimum-DL-Power-TimeslotLCR-InformationItem
                                                          CRITICALITY ignore
                                                                                  EXTENSION DL-Power
                                                                                                                          PRESENCE optional
                                                                                                                                                 }.
    -- Applicable to 1.28Mcps TDD only
    . . .
3
DL-Timeslot-Information768 ::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem768
DL-Timeslot-InformationItem768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
                                  MidambleShiftAndBurstType768,
   midambleShiftAndBurstType768
    tFCI-Presence
                                    TFCI-Presence,
    dL-Code-Information768
                                    TDD-DL-Code-Information768,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationItem768-ExtIEs} } OPTIONAL,
    . . .
DL-Timeslot-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF DL-TimeSlot-ISCP-InfoItem
DL-TimeSlot-ISCP-InfoItem ::= SEOUENCE {
   timeSlot
                                TimeSlot,
    dL-TimeslotISCP
                                DL-TimeslotISCP,
    iE-Extensions
                                ProtocolExtensionContainer { { DL-TimeSlot-ISCP-InfoItem-ExtIEs } } OPTIONAL,
    . . .
}
DL-TimeSlot-ISCP-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-TimeSlot-ISCP-LCR-Information ::= SEOUENCE (SIZE (1..maxNrOfDLTsLCR)) OF DL-TimeSlot-ISCP-LCR-InfoItem
DL-TimeSlot-ISCP-LCR-InfoItem ::= SEOUENCE {
    timeSlotLCR
                                    TimeSlotLCR,
    dL-TimeslotISCP
                                    DL-TimeslotISCP,
   iE-Extensions
                                    ProtocolExtensionContainer { { DL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs } }
                                                                                                                          OPTIONAL,
    . . .
```

```
DL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-TimeslotISCP
                      ::= INTEGER (0..91)
-- According to mapping in TS 25.123 [24]
Downlink-Compressed-Mode-Method
                                   ::= ENUMERATED {
    not-Used-puncturing,
    sFdiv2,
    higher-layer-scheduling,
    . . .
}
DPC-Mode ::= ENUMERATED {
    mode0,
    mode1,
       . . .
}
DPC-Mode-Change-SupportIndicator ::= ENUMERATED {
   dPC-ModeChangeSupported
DPCH-ID
                        ::= INTEGER (0..239)
DPCH-ID768 ::= INTEGER (0..479)
DPCHConstantValue ::= INTEGER (-10..10)
-- Unit dB, Step 1dB
DRACControl
             ::= ENUMERATED {
    not-Used-requested,
    not-requested
}
DRXCycleLengthCoefficient
                                      ::= INTEGER (3..9)
-- See in TS 25.331 [16]
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,
                                            ProtocolExtensionContainer { {DRX-Information-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
DRX-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
```

```
DRX-Information-to-Modify ::= CHOICE {
    modify
                         DRX-Information-to-Modify-Items,
    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,
                                            ProtocolExtensionContainer { {DRX-Information-to-Modify-Items-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DRX-Information-to-Modify-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
DSCH-RNTI ::= INTEGER (0..65535)
DSCH-FlowControlInformation ::= SEQUENCE (SIZE(1..16)) OF DSCH-FlowControlItem
DSCH-FlowControlItem ::= SEQUENCE {
    dSCH-SchedulingPriority
                                        SchedulingPriorityIndicator,
    mAC-c-sh-SDU-Lengths
                                        MAC-c-sh-SDU-LengthList,
    iE-Extensions
                                        ProtocolExtensionContainer { {DSCH-FlowControlItem-ExtIEs } } OPTIONAL,
    . . .
J
DSCH-FlowControlItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DSCH-InitialWindowSize CRITICALITY ignore EXTENSION DSCH-InitialWindowSize PRESENCE optional },
    . . .
DSCH-ID
                        ::= INTEGER (0..255)
DSCH-InitialWindowSize
                                ::= INTEGER (1..255)
-- Number of MAC-c/sh SDUs.
-- 255 = Unlimited number of MAC-c/sh SDUs
DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNoOfDSCHs)) OF DSCH-TDD-InformationItem
DSCH-TDD-InformationItem ::= SEOUENCE {
    dSCH-ID
                                        DSCH-ID,
    dl-ccTrCHID
                                        CCTrCH-ID, -- DL CCTrCH in which the DSCH is mapped
    trChSourceStatisticsDescriptor
                                        TrCH-SrcStatisticsDescr,
    transportFormatSet
                                        TransportFormatSet,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    bler
                                        BLER,
    iE-Extensions
                                        ProtocolExtensionContainer { {DSCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
```

}

```
DSCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-TrafficClass
                                            CRITICALITY ignore EXTENSION TrafficClass
                                                                                                          PRESENCE mandatory } |
    { 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-TnlQos
                                            CRITICALITY ignore EXTENSION TnlQos
                                                                                                          PRESENCE optional },
    -- Shall be ignored if bearer establishment with ALCAP.
    . . .
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
                                                ProtocolExtensionContainer { { DTX-Cycle-2ms-Items-ExtIEs } }
                                                                                                                                 OPTIONAL,
    . . .
DTX-Cycle-2ms-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
DTX-Cycle-2ms-to-Modify-Items ::= SEQUENCE {
    uE-DTX-Cycle1-2ms
                                   UE-DTX-Cycle1-2ms
                                                                OPTIONAL,
    uE-DTX-Cycle2-2ms
                                    UE-DTX-Cycle2-2ms
                                                                OPTIONAL,
   mAC-DTX-Cycle-2ms
                                    MAC-DTX-Cycle-2ms
                                                                OPTIONAL,
   iE-Extensions
                                                ProtocolExtensionContainer { { DTX-Cycle-2ms-to-Modify-Items-ExtIEs } }
                                                                                                                                        OPTIONAL,
    . . .
DTX-Cycle-2ms-to-Modify-Items-ExtIEs RNSAP-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,
                                                ProtocolExtensionContainer { { DTX-Cycle-10ms-Items-ExtIEs } }
   iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
DTX-Cycle-10ms-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
DTX-Cycle-10ms-to-Modify-Items ::= SEQUENCE {
    uE-DTX-Cycle1-10ms
                                    UE-DTX-Cycle1-10ms
                                                                OPTIONAL,
```

```
uE-DTX-Cycle2-10ms
                                    UE-DTX-Cycle2-10ms
                                                                 OPTIONAL,
    mAC-DTX-Cycle-10ms
                                     MAC-DTX-Cycle-10ms
                                                                                                                                   OPTIONAL.
    iE-Extensions
                                                 ProtocolExtensionContainer { { DTX-Cycle-10ms-to-Modify-Items-ExtIEs } }
                                                                                                                                           OPTIONAL.
    . . .
DTX-Cycle-10ms-to-Modify-Items-ExtIEs RNSAP-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
    cOI-DTX-Timer
                                COI-DTX-Timer,
                                UE-DPCCH-burst1,
    uE-DPCCH-burst1
                                UE-DPCCH-burst2,
    uE-DPCCH-burst2
                                ProtocolExtensionContainer { {DTX-Information-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DTX-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DTX-Information-to-Modify ::= CHOICE {
    modify
                         DTX-Information-to-Modify-Items,
    deactivate
                         NULL,
    . . .
}
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
                                                                                                                                           OPTIONAL.
    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,
                                     ProtocolExtensionContainer { {DTX-Information-to-Modify-Items-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
}
DTX-Information-to-Modify-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
-- E
EARFCN ::= INTEGER (0..maxEARFCN)
```

```
EARFCN-Information ::= CHOICE {
    fDD
            EARFCN-FDD,
    t.DD
            EARFCN.
    . . .
EARFCN-FDD ::= SEQUENCE {
    uL-EARFCN
                    EARFCN
    dL-EARFCN
                    EARFCN
}
E-AGCH-Table-Choice ::= ENUMERATED{table16B, table16B-1, ...}
ECGI ::= SEQUENCE {
    pLMN-Identity
                            PLMN-Identity,
    e-UTRAN-Cell-ID
                            BIT STRING (SIZE (28)),
                            ProtocolExtensionContainer { {ECGI-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
ECGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
EDCH-DDI-Value ::= INTEGER (0..62)
EDCH-FDD-DL-ControlChannelInformation ::= SEQUENCE {
    eAGCH-ERGCH-EHICH-FDD-ScramblingCode
                                                         DL-ScramblingCode
                                                                                              OPTIONAL,
                                                         FDD-DL-ChannelisationCodeNumber
    eAGCH-ChannelisationCode
                                                                                              OPTIONAL,
    primary-e-RNTI
                                                         E-RNTI
                                                                                              OPTIONAL,
    secondary-e-RNTI
                                                         E-RNTI
                                                                                              OPTIONAL,
    eRGCH-EHICH-ChannelisationCode
                                                         FDD-DL-ChannelisationCodeNumber,
    eRGCH-SignatureSequence
                                                         ERGCH-SignatureSequence
                                                                                              OPTIONAL,
    eHICH-SignatureSequence
                                                         EHICH-SignatureSequence
                                                                                              OPTIONAL,
                                                         E-Serving-Grant-Value
    serving-Grant-Value
                                                                                              OPTIONAL,
    primary-Secondary-Grant-Selector
                                                         E-Primary-Secondary-Grant-Selector OPTIONAL,
    e-RGCH-Release-Indicator
                                                         E-RGCH-Release-Indicator
                                                                                              OPTIONAL,
    iE-Extensions
                                                         ProtocolExtensionContainer { { EDCH-FDD-DL-ControlChannelInformation-ExtIEs } }
        OPTIONAL,
    . . .
}
EDCH-FDD-DL-ControlChannelInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-RGCH-E-HICH-ChannelisationCodeValidityIndicator CRITICALITY iqnore EXTENSION E-RGCH-E-HICH-ChannelisationCodeValidityIndicator
            PRESENCE optional }|
     ID id-Default-Serving-Grant-in-DTX-Cycle2
                                                                                                                                  PRESENCE optional }|
                                                         CRITICALITY ignore EXTENSION E-Serving-Grant-Value
     ID id-UL-MIMO-DL-Control-Channel-Information
                                                                                                                                  PRESENCE optional }.
                                                         CRITICALITY reject EXTENSION UL-MIMO-DL-Control-Channel-Information
    . . .
E-RGCH-E-HICH-ChannelisationCodeValidityIndicator ::= ENUMERATED
    e-RGCH-E-HICH-Channelisation-Code-response-not-valid
}
EDCH-FDD-Information ::= SEQUENCE {
```

eDCH-MACdFlows-Information hARQ-Process-Allocation-Scheduled-2ms-EDCH OPTIONAL.	EDCH-MACdFlows-Information, HARQ-Process-Allocation-2ms-EDCH	
e-DCH-Maximum-Bitrate e-DCH-Processing-Overload-Level e-DCH-Reference-Power-Offset iE-Extensions	E-DCH-Maximum-Bitrate E-DCH-Processing-Overload-Level E-DCH-Reference-Power-Offset ProtocolExtensionContainer { { EDCH-FDD-Information-ExtIEs } }	OPTIONAL, OPTIONAL, OPTIONAL, OPTIONAL,
}		
EDCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSI { ID id-E-DCH-PowerOffset-for-SchedulingInfo { ID id-SixteenQAM-UL-Operation-Indicator { ID id-E-AGCH-Table-Choice conditional}	CRITICALITY ignore EXTENSION E-DCH-PowerOffset-for-SchedulingInfo CRITICALITY reject EXTENSION SixteenQAM-UL-Operation-Indicator CRITICALITY ignore EXTENSION E-AGCH-Table-Choice	PRESENCE optional}  PRESENCE optional}  PRESENCE
The IE shall be present if the SixteenQAM U { ID id-SixtyfourQAM-UL-Operation-Indicator { ID id-UL-MIMO-Information  }	<i>L Operation Indicator</i> IE is set to "Activate"— CRITICALITY reject EXTENSION SixtyfourQAM-UL-Operation-Indicator CRITICALITY reject EXTENSION UL-MIMO-Information	PRESENCE optional}  PRESENCE optional},
EDCH-FDD-InformationResponse ::= SEQUENCE { eDCH-MACdFlow-Specific-InformationResponse hARQ-Process-Allocation-Scheduled-2ms-EDCH OPTIONAL,	EDCH-MACdFlow-Specific-InformationResponse, HARQ-Process-Allocation-2ms-EDCH	
iE-Extensions OPTIONAL,	<pre>ProtocolExtensionContainer { { EDCH-FDD-InformationResponse-ExtIE</pre>	s } }
}		
EDCH-FDD-InformationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {		
}		
EDCH-MACdFlow-Specific-InformationResponse ::= SEQUENCE (SIZE (1maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlow-Specific-InformationResponseItem		
EDCH-MACdFlow-Specific-InformationResponseItem ::= eDCH-MACdFlow-ID bindingID	SEQUENCE { EDCH-MACdFlow-ID, BindingID	
OPTIONAL, transportLayerAddress	TransportLayerAddress	
OPTIONAL,		
hARQ-Process-Allocation-NonSched-2ms-EDCH OPTIONAL,	HARQ-Process-Allocation-2ms-EDCH	
iE-Extensions ProtocolExtensionC	Container { {EDCH-MACdFlow-Specific-InformationResponseItem-ExtIEs} } OPTION	AL,
}		
EDCH-MACdFlow-Specific-InformationResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-TransportBearerNotSetupIndicator CRITICALITY ignore EXTENSION TransportBearerNotSetupIndicator PRESENCE optional }, FDD only		
}		

```
EDCH-FDD-Information-To-Modify ::= SEQUENCE {
    eDCH-MACdFlow-Specific-Information
                                                     EDCH-MACdFlow-Specific-InfoToModifyList,
                                                    HARO-Process-Allocation-2ms-EDCH
    hARO-Process-Allocation-Scheduled-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 { { EDCH-FDD-Information-To-Modify-ExtIEs } }
    OPTIONAL,
    . . .
EDCH-FDD-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                                 PRESENCE optional }
                                                     CRITICALITY ignore EXTENSION E-DCH-PowerOffset-for-SchedulingInfo
 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"-
{ ID id-SixtyfourOAM-UL-Operation-Indicator
                                                     CRITICALITY reject EXTENSION SixtyfourQAM-UL-Operation-Indicator
                                                                                                                                 PRESENCE optional } |
{ ID id-UL-MIMO-Information
                                                     CRITICALITY reject EXTENSION UL-MIMO-Information
                                                                                                                                 PRESENCE optional },
. . .
E-DCH-FDD-Update-Information ::= SEQUENCE
    e-DCH-MACdFlow-Specific-UpdateInformation
                                                     E-DCH-MACdFlow-Specific-UpdateInformation
            OPTIONAL,
    hARQ-Process-Allocation-Scheduled-2ms-EDCH
                                                     HARQ-Process-Allocation-2ms-EDCH
                            OPTIONAL,
                                                     ProtocolExtensionContainer { { E-DCH-FDD-Update-Information-ExtIEs } }
    iE-Extensions
        OPTIONAL,
    . . .
E-DCH-FDD-Update-Information-ExtIEs RNSAP-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 ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     EDCH-MACdFlow-ID,
    hARO-Process-Allocation-NonSched-2ms-EDCH
                                                     HARO-Process-Allocation-2ms-EDCH
                            OPTIONAL,
```

```
ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-UpdateInformation-Item-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
E-DCH-MACdFlow-Specific-UpdateInformation-Item-ExtIEs RNSAP-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.
   iE-Extensions
                                            ProtocolExtensionContainer { { E-DCH-DL-Control-Channel-Change-Information-Item-ExtIEs } } OPTIONAL,
    . . .
3
E-DCH-DL-Control-Channel-Change-Information-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
۱
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 ::= SEOUENCE {
    e-DCH-RL-ID
                                            RL-ID,
                                            ProtocolExtensionContainer { { E-DCH-DL-Control-Channel-Grant-Information-Item-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
E-DCH-DL-Control-Channel-Grant-Information-Item-ExtIEs RNSAP-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-HARQ-PO-FDD ::= INTEGER (0.. maxNrOfEDCH-HARQ-PO-QUANTSTEPs)
E-DCH-LogicalChannelInformation ::= SEQUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelInformationItem
E-DCH-LogicalChannelInformationItem ::= SEQUENCE
    logicalChannelId
                                    LogicalChannelID,
    schedulingPriorityIndicator
                                    SchedulingPriorityIndicator,
    schedulingInformation
                                    SchedulingInformation,
    mACes-GuaranteedBitRate
                                    MACes-Guaranteed-Bitrate
                                                                     OPTIONAL,
    eDCH-DDI-Value
                                    EDCH-DDI-Value,
    mACd-PDU-Size-List
                                    E-DCH-MACdPDU-SizeList,
                                    ProtocolExtensionContainer { { E-DCH-LogicalChannelInformationItem-ExtIEs } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
```

```
. . .
3
E-DCH-LogicalChannelInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-MaximumMACdPDU-SizeExtended
                                            CRITICALITY reject
                                                                    EXTENSION MAC-PDU-SizeExtended
                                                                                                                 PRESENCE optional } |
     ID id-MACes-Maximum-Bitrate-LCR
                                                                                                                        PRESENCE optional} | --
                                            CRITICALITY ignore
                                                                    EXTENSION MACes-Maximum-Bitrate-LCR
1.28Mcps TDD only
    { ID id-UE-AggregateMaximumBitRate-Enforcement-Indicator CRITICALITY ignore EXTENSION UE-AggregateMaximumBitRate-Enforcement-Indicator
    PRESENCE optional },
    . . .
E-DCH-Maximum-Bitrate ::= INTEGER (0..5742,...,5743..11498 11499..34507)
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-OUANTSTEPs)
E-DCH-MACdPDU-SizeList ::= SEOUENCE (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 RNSAP-PROTOCOL-EXTENSION ::=
    . . .
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,
    mACes-GuaranteedBitRate
                                    MACes-Guaranteed-Bitrate
                                                                    OPTIONAL,
    eDCH-DDI-Value
                                    EDCH-DDI-Value
                                                                    OPTIONAL,
    mACd-PDU-Size-List
                                    E-DCH-MACdPDU-SizeToModifyList,
    iE-Extensions
                                    ProtocolExtensionContainer { { E-DCH-LogicalChannelToModifyItem-ExtIEs } }
                                                                                                                                OPTIONAL,
    . . .
}
E-DCH-LogicalChannelToModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-MaximumMACdPDU-SizeExtended
                                                                                                         PRESENCE optional } |
                                           CRITICALITY reject
                                                                    EXTENSION MAC-PDU-SizeExtended
```

```
952
3GPP TS 25.423 version 11.4.0 Release 11
                                                                                                                        ETSI TS 125 423 V11.4.0 (2013-01)
                                                                                                                           PRESENCE optional }, --
    { ID id-MACes-Maximum-Bitrate-LCR
                                             CRITICALITY ignore
                                                                                 MACes-Maximum-Bitrate-LCR
                                                                     EXTENSION
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,
    . . .
3
E-DCH-LogicalChannelToDeleteItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
LogicalChannelID ::= INTEGER (1..15)
EDCH-MACdFlow-ID ::= INTEGER (0..maxNrOfEDCHMACdFlows-1)
EDCH-MACdFlow-ID-LCR ::= INTEGER (0..maxNrOfEDCHMACdFlowsLCR-1)
EDCH-MACdFlows-Information ::= SEQUENCE {
    eDCH-MACdFlow-Specific-Information
                                                     EDCH-MACdFlow-Specific-InfoList,
                                                     ProtocolExtensionContainer { { EDCH-MACdFlow-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
E-DCH-MACdFlow-Multiplexing-List ::= BIT STRING ( SIZE(maxNrOfEDCHMACdFlows) )
EDCH-MACdFlow-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
EDCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlow-Specific-InfoItem
EDCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    eDCH-MACdFlow-ID
                                         EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                             OPTIONAL.
    tnl0oS
                                        Tnl0os
                                                                             OPTIONAL,
    payloadCRC-PresenceIndicator
                                         PayloadCRC-PresenceIndicator,
    maxNr-Retransmissions-EDCH
                                        MaxNr-Retransmissions-EDCH,
    trafficClass
                                        TrafficClass,
    eDCH-HARO-PO-FDD
                                         E-DCH-HARO-PO-FDD,
    eDCH-MACdFlow-Multiplexing-List
                                         E-DCH-MACdFlow-Multiplexing-List
                                                                             OPTIONAL,
    eDCH-Grant-Type-Information
                                        E-DCH-Grant-Type-Information
                                                                             OPTIONAL,
    bundlingModeIndicator
                                         BundlingModeIndicator
                                                                             OPTIONAL,
                                         E-DCH-LogicalChannelInformation,
    eDCHLogicalChannelInformation
```

ExtIEs

```
ProtocolExtensionContainer { { EDCH-MACdFlow-Specific-InfoItem-ExtIEs } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
EDCH-MACdFlow-Specific-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-TrCH-SrcStatisticsDescr CRITICALITY ignore EXTENSION TrCH-SrcStatisticsDescr PRESENCE optional },
    . . .
}
EDCH-MACdFlow-Specific-InfoToModifyList ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlow-Specific-InfoToModifyItem
EDCH-MACdFlow-Specific-InfoToModifyItem ::= SEQUENCE {
    eDCH-MACdFlow-ID
                                         EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                             OPTIONAL,
    transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
    tnl0oS
                                        TnlOos
                                                                             OPTIONAL,
                                        MaxNr-Retransmissions-EDCH
    maxNr-Retransmissions-EDCH
                                                                             OPTIONAL,
    trafficClass
                                         TrafficClass
                                                                             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-LogicalChannelToModifv
                                         E-DCH-LogicalChannelToModify
                                                                             OPTIONAL,
    eDCH-LogicalChannelToDelete
                                        E-DCH-LogicalChannelToDelete
                                                                             OPTIONAL,
    iE-Extensions
                                         ProtocolExtensionContainer { { EDCH-MACdFlow-Specific-InfoToModifyItem-ExtIEs } }
    OPTIONAL,
    . . .
EDCH-MACdFlow-Specific-InfoToModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
EDCH-MACdFlows-To-Delete ::= SEOUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlows-To-Delete-Item
EDCH-MACdFlows-To-Delete-Item ::= SEQUENCE {
    eDCH-MACdFlow-ID
                                         EDCH-MACdFlow-ID,
                                         ProtocolExtensionContainer { { EDCH-MACdFlows-To-Delete-Item-ExtIEs } }
    iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
}
EDCH-MACdFlows-To-Delete-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
EDCH-RL-Indication ::= ENUMERATED {
    eDCH,
    non-EDCH
}
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-
```

```
maxBits-MACe-PDU-non-scheduled
                                                 Max-Bits-MACe-PDU-non-scheduled,
    hARO-Process-Allocation-NonSched-2ms
                                                 HARO-Process-Allocation-2ms-EDCH
                OPTIONAL.
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Transmission-Grant-Items-ExtIEs } }
    OPTIONAL,
    . . .
E-DCH-Non-Scheduled-Transmission-Grant-Items-ExtIEs RNSAP-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-TFCI-Table-Index ::= INTEGER (0..1,...,2..7)
E-DCH-Serving-cell-change-informationResponse ::= SEQUENCE {
    e-DCH-serving-cell-outcome-choice
                                             E-DCH-serving-cell-change-choice,
                                             ProtocolExtensionContainer { { E-DCH-serving-cell-change-informationResponse-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
E-DCH-serving-cell-change-informationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
E-DCH-serving-cell-change-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.
                                                     ProtocolExtensionContainer { { E-DCH-serving-cell-change-successful-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
E-DCH-serving-cell-change-successful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-DCH-RL-InformationList-Rsp ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF E-DCH-RL-InformationList-Rsp-Item
E-DCH-RL-InformationList-Rsp-Item ::= SEQUENCE {
    e-DCH-reconfigured-RL-Id
                                                 RL-ID,
    e-DCH-FDD-DL-Control-Channel-Info
                                                 EDCH-FDD-DL-ControlChannelInformation,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-RL-InformationList-Rsp-Item-ExtIEs } }
                                                                                                                                   OPTIONAL,
    . . .
}
E-DCH-RL-InformationList-Rsp-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

}

```
E-DCH-serving-cell-change-unsuccessful ::= SEQUENCE {
    cause
                                     Cause,
                                     ProtocolExtensionContainer { { E-DCH-serving-cell-change-unsuccessful-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
E-DCH-serving-cell-change-unsuccessful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
E-DCH-TTI-Length ::= CHOICE {
    two-ms
                DTX-Cycle-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
    . . .
EDPCH-Information-FDD ::= SEQUENCE {
    maxSet-E-DPDCHs
                                                             Max-Set-E-DPDCHs,
    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,
    hARO-Info-for-E-DCH
    hSDSCH-Configured-Indicator
                                                             HSDSCH-Configured-Indicator,
                                         ProtocolExtensionContainer { { EDPCH-Information-FDD-ExtIEs } }
    iE-Extensions
                                                                                                                           OPTIONAL,
EDPCH-Information-FDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                     CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor
    { ID id-MinimumReducedE-DPDCH-GainFactor
                                                                                                                           PRESENCE optional },
    . . .
}
EDPCH-Information-RLReconfPrepare-FDD ::= SEQUENCE {
    maxSet-E-DPDCHs
                                                 Max-Set-E-DPDCHs
                                                                          OPTIONAL,
    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,
    hARO-Info-for-E-DCH
                                                 HARO-Info-for-E-DCH
                                                                                      OPTIONAL,
```

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hSDSCH-Configured-Indicator HSDSCH-Configured-Indicator OPTIONAL, iE-Extensions ProtocolExtensionContainer { { EDPCH-Information-RLReconfPrepare-FDD-ExtIEs } } OPTIONAL, . . . EDPCH-Information-RLReconfPrepare-FDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-MinimumReducedE-DPDCH-GainFactor PRESENCE optional }, CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor . . . } EDPCH-Information-RLReconfRequest-FDD ::= SEQUENCE { maxSet-E-DPDCHs Max-Set-E-DPDCHs OPTIONAL, 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, hARO-Info-for-E-DCH HARO-Info-for-E-DCH OPTIONAL, hSDSCH-Configured-Indicator HSDSCH-Configured-Indicator OPTIONAL, ProtocolExtensionContainer { { EDPCH-Information-RLReconfRequest-FDD-ExtIEs } } iE-Extensions OPTIONAL, . . . EDPCH-Information-RLReconfRequest-FDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-MinimumReducedE-DPDCH-GainFactor CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor PRESENCE optional }, . . . } E-DPCCH-PO ::= INTEGER (0..maxNrOfEDPCCH-PO-OUANTSTEPs) E-DPDCH-PowerInterpolation ::= BOOLEAN E-Primary-Secondary-Grant-Selector ::= ENUMERATED { primary, secondary EHICH-SignatureSequence ::= INTEGER (0..maxNrofSigSeqERGHICH-1) E-RGCH-Release-Indicator ::= ENUMERATED {e-RGCHreleased} ERGCH-SignatureSequence ::= INTEGER (0..maxNrofSigSeqERGHICH-1)

```
E-Serving-Grant-Value ::= INTEGER (0..38)
E-RGCH-2-IndexStepThreshold ::= INTEGER (0..37)
E-RGCH-3-IndexStepThreshold ::= INTEGER (0..37)
EDCH-Serving-RL ::= CHOICE {
    e-DCH-Serving-RL-in-this-DRNS
                                             EDCH-Serving-RL-in-this-DRNS,
    e-DCH-Serving-RL-not-in-this-DRNS
                                             NULL,
    . . .
EDCH-Serving-RL-in-this-DRNS ::= SEQUENCE {
    e-DCH-Serving-RL-Id
                                    RL-ID,
    iE-Extensions
                                    ProtocolExtensionContainer { { EDCH-Serving-RL-in-this-DRNS-ExtIEs } }
                                                                                                                       OPTIONAL,
    . . .
EDCH-Serving-RL-in-this-DRNS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Enhanced-FACH-Information-ResponseFDD ::= SEQUENCE {
    common-HS-DSCH-RNTI-priorityQueueInfo-EnhancedFACH
                                                                          PriorityQueue-InfoList-EnhancedFACH-PCH,
    dedicated-HS-DSCH-RNTI-priorityQueueInfo-EnhancedFACH
                                                                          PriorityQueue-InfoList-EnhancedFACH-PCH,
    priorityQueueInfo-EnhancedPCH
                                                 PriorityOueue-InfoList-EnhancedFACH-PCH
                                                                                                                           OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation
                                                             HSDSCH-Initial-Capacity-Allocation,
                                                             HSDSCH-RNTI
    hSDSCH-RNTI
                OPTIONAL.
                                         ProtocolExtensionContainer { { Enhanced-FACH-Information-ResponseFDD-ExtIEs } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
Enhanced-FACH-Information-ResponseFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Enhanced-FACH-Information-ResponseLCR ::= SEQUENCE {
    common-HS-DSCH-RNTI-priorityQueueInfo-EnhancedFACH
                                                                          PriorityQueue-InfoList-EnhancedFACH-PCH,
    dedicated-HS-DSCH-RNTI-priorityQueueInfo-EnhancedFACH
                                                                          PriorityQueue-InfoList-EnhancedFACH-PCH,
                                                                                                                           OPTIONAL.
    priorityQueueInfo-EnhancedPCH
                                                 PriorityQueue-InfoList-EnhancedFACH-PCH
    hSDSCH-Initial-Capacity-Allocation
                                                             HSDSCH-Initial-Capacity-Allocation,
    hSDSCH-RNTI
                                                             HSDSCH-RNTI
                OPTIONAL,
    iE-Extensions
                                         ProtocolExtensionContainer { { Enhanced-FACH-Information-ResponseLCR-ExtIEs } }
                                                                                                                                          OPTIONAL,
    . . .
Enhanced-FACH-Information-ResponseLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Enhanced-FACH-Support-Indicator ::= NULL
```

```
EnhancedHSServingCC-Abort ::= ENUMERATED {abortEnhancedHSServingCC,...}
Enhanced-PCH-Capability ::= ENUMERATED {
    enhanced-pch-capable,
    enhanced-pch-not-capable
}
E-RNTI ::= INTEGER (0..65535)
E-ROCH-PowerOffset ::= INTEGER(0..255,...)
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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-TFCS-Information ::= SEOUENCE {
    e-DCH-TFCI-Table-Index
                                                            E-DCH-TFCI-Table-Index,
    e-DCH-Min-Set-E-TFCI
                                                     E-TFCI,
   reference-E-TFCI-Information
                                                     Reference-E-TFCI-Information,
                                                     ProtocolExtensionContainer { {E-TFCS-Information-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
}
E-TFCS-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-Minimum-Set-E-TFCIValidityIndicator CRITICALITY reject EXTENSION E-DCH-Minimum-Set-E-TFCIValidityIndicator
                                                                                                                                         PRESENCE
optional }|
    { ID id-E-TFCI-Boost-Information
                                                         CRITICALITY reject EXTENSION E-TFCI-Boost-Information
    PRESENCE optional }|
    { ID id-E-DPDCH-PowerInterpolation
                                                         CRITICALITY reject EXTENSION E-DPDCH-PowerInterpolation
       PRESENCE optional },
    . . .
}
E-DCH-Minimum-Set-E-TFCIValidityIndicator ::= ENUMERATED {
    e-DCH-Minimum-Set-E-TFCI-response-not-valid
}
```

```
E-TTI ::= ENUMERATED {
    ttil0.
    tti2
-- 10ms TTI, 2ms TTI
}
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
Enhanced-PrimaryCPICH-EcNo
                                  ::= INTEGER (0..49)
EventA ::= SEQUENCE {
                           MeasurementThreshold,
    measurementTreshold
    measurementHysteresisTime MeasurementHysteresisTime
                                                               OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {EventA-ExtIEs} } OPTIONAL,
    . . .
}
EventA-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
EventB ::= SEQUENCE {
   measurementTreshold
                           MeasurementThreshold,
    measurementHysteresisTime MeasurementHysteresisTime
                                                               OPTIONAL,
                           ProtocolExtensionContainer { {EventB-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
}
EventB-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
EventC ::= SEQUENCE {
    measurementIncreaseDecreaseThreshold MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime
                               MeasurementChangeTime,
   iE-Extensions ProtocolExtensionContainer { {EventC-ExtIEs} } OPTIONAL,
    . . .
}
EventC-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
```

```
EventD ::= SEQUENCE {
    measurementIncreaseDecreaseThreshold
                                             MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime
                                 MeasurementChangeTime,
    iE-Extensions
                            ProtocolExtensionContainer { {EventD-ExtIEs} } OPTIONAL,
    . . .
3
EventD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
EventE ::= SEQUENCE
    measurement.Threshold1
                                 MeasurementThreshold,
    measurement.Threshold2
                                 MeasurementThreshold
                                                                  OPTIONAL,
    measurementHysteresisTime
                                 MeasurementHysteresisTime
                                                                  OPTIONAL,
    reportPeriodicity
                                 ReportPeriodicity
                                                              OPTIONAL,
    iE-Extensions
                             ProtocolExtensionContainer { {EventE-ExtIEs} } OPTIONAL,
    . . .
EventE-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
EventF ::= SEQUENCE
    measurementThreshold1
                                 MeasurementThreshold.
    measurementThreshold2
                                 MeasurementThreshold
                                                                  OPTIONAL,
    measurementHysteresisTime
                                 MeasurementHysteresisTime
                                                                  OPTIONAL,
    reportPeriodicity
                            ReportPeriodicity
                                                         OPTIONAL,
    iE-Extensions
                             ProtocolExtensionContainer { {EventF-ExtIEs} } OPTIONAL,
    . . .
EventF-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
EventH ::= SEQUENCE {
    measurementThreshold1
                                 MeasurementThreshold,
    measurementThreshold2
                                 MeasurementThreshold
                                                                  OPTIONAL,
                                 MeasurementHysteresisTime
    measurementHysteresisTime
                                                                  OPTIONAL,
    reportPeriodicity
                                 ReportPeriodicity
                                                                  OPTIONAL,
    measurementFluctuationRange INTEGER (0..100)
                                                                  OPTIONAL,
                                 ProtocolExtensionContainer { {EventH-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
EventH-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Event1F-Parameters
                        ::= SEQUENCE {
    measurementQuantity
                            MeasurementQuantity,
    threshold
                            INTEGER(-120..165),
```

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```
. . .
}
Event11-Parameters
                     ::= SEQUENCE {
    threshold
                            INTEGER(-120..-25),
    . . .
}
ExtendedGSMCellIndividualOffset ::= INTEGER (-50..-11|11..50)
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-TDD-Information
                                                 E-DCH-TDD-Information,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Information-ExtIEs} }
                                                                                                                           OPTIONAL,
    . . .
E-DCH-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-PUCH-Information ::= SEOUENCE {
   minCR
                                                 CodeRate,
    maxCR
                                                 CodeRate,
    harqInfo
                                                 HARO-Info-for-E-DCH,
    n-E-UCCH
                                                 N-E-UCCH,
                                                 ProtocolExtensionContainer { { E-PUCH-Information-ExtIEs } }
   iE-Extensions
                                                                                                                           OPTIONAL,
    . . .
٦
E-PUCH-Information-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-TFCS-Information-TDD ::= SEQUENCE {
                                                 E-DCH-OPSK-RefBetaInfo,
    e-DCH-OPSK-RefBetaInfo
    e-DCH-sixteenOAM-RefBetaInfo
                                                 E-DCH-sixteenQAM-RefBetaInfo,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-TFCS-Information-TDD-ExtIEs } }
                                                                                                                           OPTIONAL,
    . . .
}
E-TFCS-Information-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-DCH-QPSK-RefBetaInfo ::= SEQUENCE (SIZE (1..maxNrOfRefBetas)) OF E-DCH-RefBeta-Item
E-DCH-sixteenOAM-RefBetaInfo ::= SEQUENCE (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 ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                                     AllocationRetentionPriority,
    tnl0os
                                                     Tnl0os
                                                                                 OPTIONAL,
    bindingID
                                                     BindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                 OPTIONAL,
    payloadCRC-PresenceIndicator
                                                     PayloadCRC-PresenceIndicator,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                     MaxNr-Retransmissions-EDCH,
    eDCH-HARO-PO-TDD
                                                     E-DCH-HARO-PO-TDD,
    eDCH-MACdFlow-Multiplexing-List
                                                     E-DCH-MACdFlow-Multiplexing-List
                                                                                                                          OPTIONAL.
    eDCH-Grant-TypeTDD
                                                     E-DCH-Grant-TypeTDD,
    eDCHLogicalChannelInformation
                                                     E-DCH-LogicalChannelInformation,
                                                     ProtocolExtensionContainer { { E-DCH-MACdFlow-InfoTDDItem-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
E-DCH-MACdFlow-InfoTDDItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-eDCH-MACdFlow-Retransmission-Timer-LCR CRITICALITY iqnore
                                                                             EXTENSION E-DCH-MACdFlow-Retransmission-Timer-LCR
                                                                                                                                          PRESENCE
optional }|
    { ID id-TrafficClass
                                                     CRITICALITY ignore
                                                                             EXTENSION TrafficClass
    PRESENCE mandatory },
    . . .
E-DCH-MACdFlow-Retransmission-Timer-LCR ::= 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-TimeslotResource ::= BIT STRING (SIZE (13))
E-DCH-PowerResource ::= INTEGER(1..32)
TddE-PUCH-Offset ::= INTEGER(0..255)
E-DCH-TDD-Information ::= SEOUENCE {
    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,
```

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```
E-DCH-TDD-Information-Extles RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Maximum-Bitrate ::= INTEGER (0..9201,...)
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
                                                 EDCH-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,
                                                 ProtocolExtensionContainer { { E-DCH-Information-Reconfig-ExtIEs } }
    iE-Extensions
                                                                                                                           OPTIONAL,
    . . .
E-DCH-Information-Reconfig-ExtIEs RNSAP-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,
                                             ProtocolExtensionContainer { { E-DCH-TDD-Information-to-Modify-ExtIEs } }
    iE-Extensions
                                                                                                                                   OPTIONAL,
    . . .
3
E-DCH-TDD-Information-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-E-DCH-MACdPDUSizeFormat
                                             CRITICALITY reject EXTENSION E-DCH-MACdPDUSizeFormat
                                                                                                                       PRESENCE optional } |
    { ID id-UE-TS0-CapabilityLCR
                                             CRITICALITY ignore EXTENSION UE-TS0-CapabilityLCR
                                                                                                                      PRESENCE optional },
    . . .
E-DCH-TDD-Information-to-Modify-List ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-ModifyTDDItem
E-DCH-MACdFlow-ModifyTDDItem ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                                     AllocationRetentionPriority
                                                                                      OPTIONAL,
    transportBearerRequestIndicator
                                                     TransportBearerRequestIndicator,
    bindingID
                                                     BindingID
                                                                                  OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                  OPTIONAL,
    tnl0os
                                                     Tnl0os
                                                                                  OPTIONAL,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                     MaxNr-Retransmissions-EDCH
                                                                                      OPTIONAL,
    eDCH-HARO-PO-TDD
                                                     E-DCH-HARO-PO-TDD
                                                                                                                   OPTIONAL,
                                                     E-DCH-MACdFlow-Multiplexing-List
    eDCH-MACdFlow-Multiplexing-List
                                                                                                                   OPTIONAL,
    eDCH-Grant-TypeTDD
                                                     E-DCH-Grant-TypeTDD
                                                                                                                   OPTIONAL,
                                                     E-DCH-LogicalChannelInformation
    e-DCH-LogicalChannelToAdd
                                                                                                                      OPTIONAL,
    e-DCH-LogicalChannelToModify
                                                     E-DCH-LogicalChannelToModify
                                                                                                                       OPTIONAL,
    e-DCH-LogicalChannelToDelete
                                                     E-DCH-LogicalChannelToDelete
                                                                                                                       OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { {E-DCH-MACdFlow-ModifyTDDItem-ExtIEs } }
                                                                                                                                   OPTIONAL,
    . . .
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}
E-DCH-MACdFlow-ModifyTDDItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-eDCH-MACdFlow-Retransmission-Timer-LCR
                                                         CRITICALITY ignore
                                                                                  EXTENSION E-DCH-MACdFlow-Retransmission-Timer-LCR
    PRESENCE optional }|
    { ID id-TrafficClass
                                                         CRITICALITY ignore
                                                                                  EXTENSION TrafficClass
            PRESENCE optional },
    . . .
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-HICH-Information-Response
                                                     E-HICH-InformationResp OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info
                                                     E-DCH-Non-Scheduled-Grant-Info OPTIONAL,
    e-RNTT
                                                     E-RNTI,
                                                     ProtocolExtensionContainer { { E-DCH-Information-Response-ExtIEs } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
E-DCH-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
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
                                                     EDCH-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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
E-AGCH-Specific-InformationRespListTDD ::= SEQUENCE (SIZE (1..maxNrOfEAGCHCodes)) OF E-AGCH-Specific-InformationResp-ItemTDD
E-AGCH-Specific-InformationResp-ItemTDD ::= SEQUENCE {
    timeslot
                                                     TimeSlot,
                                                     MidambleShiftAndBurstType,
    midambleShiftAndBurstType
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
                                                     ProtocolExtensionContainer { { E-AGCH-Specific-InformationResp-ItemTDD-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
E-AGCH-Specific-InformationResp-ItemTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
E-HICH-InformationResp::= SEQUENCE {
    timeslot
                                                     TimeSlot.
    midambleShiftAndBurstType
                                                     MidambleShiftAndBurstType,
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
    e-HICH-TimeOffset
                                                     E-HICH-TimeOffset.
                                                     ProtocolExtensionContainer { { E-HICH-InformationResp-ExtIEs } }
    iE-Extensions
                                                                                                                                   OPTIONAL,
    . . .
E-HICH-InformationResp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
E-HICH-TimeOffset ::= INTEGER (4..44)
E-DCH-Non-Scheduled-Grant-Info ::= SEQUENCE
                                                 E-DCH-TimeslotResource,
    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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
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-TDD-Information768
                                                 E-DCH-TDD-Information768,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-768-Information-ExtIEs } }
                                                                                                                            OPTIONAL,
E-DCH-768-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-DCH-TDD-Information768 ::= SEOUENCE {
                                                     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 RNSAP-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
                                                 EDCH-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-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-768-Information-Response ::= SEQUENCE {
    e-DCH-TDD-MACdFlow-Specific-InformationResp
                                                     E-DCH-TDD-MACdFlow-Specific-InformationResp OPTIONAL,
    e-AGCH-Specific-Information-Response768TDD
                                                     E-AGCH-Specific-InformationRespList768TDD OPTIONAL,
                                                     E-HICH-InformationResp768 OPTIONAL,
    e-HICH-Information-Response768
    e-DCH-Non-Scheduled-Grant-Info768
                                                     E-DCH-Non-Scheduled-Grant-Info768 OPTIONAL,
    e-RNTI
                                                     E-RNTI,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-768-Information-Response-ExtIEs } }
                                                                                                                                         OPTIONAL,
    . . .
E-DCH-768-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-AGCH-Specific-InformationRespList768TDD ::= SEQUENCE (SIZE (1..maxNrOfEAGCHCodes)) OF E-AGCH-Specific-InformationResp-Item768TDD
E-AGCH-Specific-InformationResp-Item768TDD ::= SEQUENCE
    timeslot
                                                     TimeSlot,
    midambleShiftAndBurstType768
                                                     MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                     TDD-ChannelisationCode768,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-AGCH-Specific-InformationResp-Item768TDD-ExtIEs } }
    OPTIONAL,
    . . .
E-AGCH-Specific-InformationResp-Item768TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-InformationResp768::= SEQUENCE
    timeslot
                                                     TimeSlot,
    midambleShiftAndBurstType768
                                                     MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                     TDD-ChannelisationCode768,
    e-HICH-TimeOffset
                                                     E-HICH-TimeOffset,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-HICH-InformationResp768-ExtIEs } }
                                                                                                                                  OPTIONAL,
```

```
. . .
}
E-HICH-InformationResp768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
E-DCH-Non-Scheduled-Grant-Info768 := SEOUENCE {
    timeslotResource
                                                 E-DCH-TimeslotResource,
                                                 E-DCH-PowerResource,
    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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-DCH-LCR-Information ::= SEQUENCE {
    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-LCR-TDD-Information
                                                 E-DCH-LCR-TDD-Information,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Information-LCR-ExtIEs } }
                                                                                                                            OPTIONAL,
    . . .
}
E-DCH-Information-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
E-PUCH-LCR-Information ::= SEQUENCE {
    minCR
                                                 CodeRate,
    maxCR
                                                 CodeRate,
    hargInfo
                                                 HARO-Info-for-E-DCH,
    pRxdesBase
                                                 E-PUCH-PRXdesBase,
                                                 TDD-TPC-UplinkStepSize-LCR,
    e-PUCH-TPC-Step-Size
    n-E-UCCH-LCR
                                                 N-E-UCCH-LCR,
                                                 ProtocolExtensionContainer { { E-PUCH-Information-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                            OPTIONAL,
    . . .
E-PUCH-Information-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-PUCH-PowerControlGAP
                                         CRITICALITY ignore
                                                                  EXTENSION ControlGAP
                                                                                              PRESENCE optional
                                                                                                                       },
    . . .
}
E-PUCH-PRXdesBase ::= INTEGER(-112..-50)
--SETP=1
```

```
E-DCH-LCR-TDD-Information ::= SEQUENCE {
    e-DCH-Physical-Layer-Category-LCR
                                                E-DCH-Physical-Layer-Category-LCR
                                                                                                                     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-LCR-TDD-Information-ExtlEs } }
                                                                                                                         OPTIONAL.
    . . .
E-DCH-LCR-TDD-Information-ExtIEs RNSAP-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-SchedulingInfo-LCRTDD CRITICALITY ignore EXTENSION MaxNr-Retransmissions-EDCH
                                                                                                                                         PRESENCE
optional }
    { ID id-E-DCH-RetransmissionTimer-For-SchedulingInfo-LCRTDD CRITICALITY ignore EXTENSION E-DCH-MACdFlow-Retransmission-Timer-LCR PRESENCE
optional }
    { ID id-E-AGCH-UE-Inactivity-Monitor-Threshold
                                                                CRITICALITY ignore
                                                                                    EXTENSION E-AGCH-UE-Inactivity-Monitor-Threshold
                                                                                                                                         PRESENCE
optional }
    { ID id-SNPL-Carrier-Group-Indicator
                                                                CRITICALITY reject EXTENSION SNPL-Carrier-Group-Indicator
                                                                                                                                         PRESENCE
optional }
    { ID id-Multi-Carrier-E-DCH-LCRTDD-PhysicalLayerCategory
                                                                CRITICALITY reject EXTENSION Multi-Carrier-E-DCH-LCRTDD-PhysicalLayerCategory
    PRESENCE optional }
    { ID id-UE-TS0-CapabilityLCR
                                                                CRITICALITY ignore EXTENSION UE-TS0-CapabilityLCR
                                                                                                                                         PRESENCE
optional }.
    . . .
E-DCH-Physical-Layer-Category-LCR ::= INTEGER (1..5)
Extended-E-DCH-LCRTDD-PhysicalLayerCategory ::= INTEGER (6,...)
Multi-Carrier-E-DCH-LCRTDD-PhysicalLayerCategory ::= INTEGER (1..8,...)
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-to-Add
                                                E-DCH-MACdFlows-Information-TDD
                                                                                                                     OPTIONAL,
                                                EDCH-MACdFlows-To-Delete
    e-DCH-MACdFlows-to-Delete
                                                                                                                     OPTIONAL,
                                                E-DCH-LCR-TDD-Information
    e-DCH-LCR-TDD-Information
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information-to-Modify
                                                E-DCH-TDD-Information-to-Modify
                                                                                                                     OPTIONAL,
                                                ProtocolExtensionContainer { { E-DCH-Information-Reconfig-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
E-DCH-Information-Reconfig-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-LCR-Information-Response ::= SEQUENCE {
    e-DCH-TDD-MACdFlow-Specific-InformationResp
                                                    E-DCH-TDD-MACdFlow-Specific-InformationResp OPTIONAL,
    e-AGCH-Specific-Information-Response-LCR-TDD
                                                    E-AGCH-Specific-InformationRespList-LCR-TDD OPTIONAL,
    e-HICH-Specific-Information-Response-LCR
                                                    E-HICH-Specific-InformationResp-LCR OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info-LCR
                                                    E-DCH-Non-Scheduled-Grant-Info-LCR OPTIONAL,
    e-RNTI
                                                    E-RNTI OPTIONAL,
```

```
ProtocolExtensionContainer { { E-DCH-Information-Response-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                                           OPTIONAL,
    . . .
E-DCH-Information-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-AGCH-Specific-InformationRespList-LCR-TDD ::= SEQUENCE (SIZE (1..maxNrOfEAGCHCodes)) OF E-AGCH-Specific-InformationResp-Item-LCR-TDD
E-AGCH-Specific-InformationResp-Item-LCR-TDD ::= SEQUENCE
    timeSlotLCR
                                                     TimeSlotLCR,
    midambleShiftLCR
                                                     MidambleShiftLCR,
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-AGCH-Specific-InformationResp-ItemTDD-LCR-ExtIEs } }
    OPTIONAL,
    . . .
E-AGCH-Specific-InformationResp-ItemTDD-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-HICH-Specific-InformationResp-LCR::= SEQUENCE {
    e-HICH-Scheduled-InformationResp-LCR
                                                     E-HICH-Scheduled-InformationRespList-LCR-TDD
                                                                                                                       OPTIONAL,
    e-HICH-non-Scheduled-InformationResp-LCR
                                                     E-HICH-InformationResp-LCR
                                                                                                                       OPTIONAL,
    e-HICH-TimeOffset-lcr
                                                     E-HICH-TimeOffset-LCR,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-HICH-Specific-InformationResp-LCR-ExtIEs } }
    OPTIONAL,
    . . .
E-HICH-Specific-InformationResp-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= ·
    . . .
E-HICH-Scheduled-InformationRespList-LCR-TDD ::= SEQUENCE (SIZE (1..maxNrOfEHICHCodes)) OF E-HICH-Scheduled-InformationResp-Item-LCR-TDD
E-HICH-Scheduled-InformationResp-Item-LCR-TDD ::= SEQUENCE {
    e-HICH-EI
                                                 E-HICH-EI,
    e-HICH-Scheduled-InformationResp-LCR
                                                 E-HICH-InformationResp-LCR,
                                                 ProtocolExtensionContainer { { E-HICH-Scheduled-InformationResp-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                                           OPTIONAL,
    . . .
E-HICH-Scheduled-InformationResp-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-HICH-EI ::= INTEGER (0..3)
E-HICH-InformationResp-LCR::= SEQUENCE {
```

```
timeSlotLCR
                                                     TimeSlotLCR,
    midambleShiftLCR
                                                     MidambleShiftLCR,
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode.
    signatureSequenceGroupIndex
                                                     SignatureSequenceGroupIndex,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-HICH-InformationResp-LCR-ExtIEs } }
                                                                                                                                          OPTIONAL.
    . . .
E-HICH-InformationResp-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
E-HICH-TimeOffset-LCR ::= INTEGER (4..15)
E-DCH-SubframeNumber-LCR ::= ENUMERATED{s0,s1}
E-DCH-TimeslotResource-LCR := BIT STRING (SIZE (5))
E-DCH-Non-Scheduled-Grant-Info-LCR := SEQUENCE {
    timeslotResource-LCR
                                                 E-DCH-TimeslotResource-LCR,
    powerResource
                                                 E-DCH-PowerResource,
    repetitionPeriod
                                                 RepetitionPeriod,
    repetitionLength
                                                 RepetitionLength,
    subframenumber
                                                 E-DCH-SubframeNumber-LCR,
    tddE-PUCH-Offset
                                                TddE-PUCH-Offset,
    tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info-LCR-ExtIEs } }
                                                                                                                                          OPTIONAL,
    . . .
E-DCH-Non-Scheduled-Grant-Info-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Enabling-Delay ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128}
-- Unit radio frame
Ext-Reference-E-TFCI-PO ::= INTEGER(30..31,...)
ExtendedPropagationDelay ::= INTEGER(255..1023)
Extended-RNC-ID
                                ::= INTEGER (4096..65535)
Extended-RNTI
                                ::= INTEGER (1048576..4194303,...)
-- From 2^20 to 2^22-1
Extended-Round-Trip-Time-Value ::= INTEGER(32767..103041)
-- See also mapping in TS 25.133 [23]
Extended-S-RNTI-Group
                                ::= SEQUENCE {
```

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```
Extended-RNTI,
    extended-sRNTI
    extended-sRNTI-BitMaskIndex
                                     ENUMERATED {
       b1.
       b2.
       b3.
       b4,
       b5,
       b6,
       b7.
       b8,
       b9,
       b10,
       b11,
       b12,
       b13,
       b14,
       b15,
       b16,
       b17,
       b18,
       b19,
       b20,
       b21,...
ExtendedAffectedUEInformationForMBMS
                                        ::= SEQUENCE (SIZE (0..maxNrOfUEs)) OF Extended-RNTI
Ext-Max-Bits-MACe-PDU-non-scheduled ::= INTEGER(19983..22978,...,22979..34507)
E-DCH-Semi-PersistentScheduling-Information-LCR ::= SEQUENCE {
    repetition-Period-List-LCR
                                            Repetition-Period-List-LCR,
    e-DCH-SPS-Indicator
                                            E-DCH-SPS-Indicator,
    e-DCH-SPS-Reservation-Indicator
                                            SPS-Reservation-Indicator
                                                                             OPTIONAL,
                                            ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-LCR-ExtIEs } }
   iE-Extensions
   OPTIONAL,
    . . .
}
E-DCH-Semi-PersistentScheduling-Information-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
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,
    e-DCH-SPS-Reservation-Indicator
                                            SPS-Reservation-Indicator
                                                                             OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs } }
           OPTIONAL,
    . . .
```

```
E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-DCH-Semi-PersistentScheduling-Information-ResponseLCR ::= SEQUENCE {
    initial-E-DCH-SPS-resource
                                                 Initial-E-DCH-SPS-resource
                                                                                      OPTIONAL,
    e-DCH-SPS-HICH-Information
                                                 E-DCH-SPS-HICH-Information
                                                                                      OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs } }
            OPTIONAL,
    . . .
E-DCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Initial-E-DCH-SPS-resource ::= SEQUENCE {
    timeslot-Resource-Related-Information
                                                 E-DCH-TimeslotResource-LCR,
    powerResource
                                                 E-DCH-PowerResource,
    repetitionPeriodIndex
                                                 RepetitionPeriodIndex,
    repetitionLength
                                                 RepetitionLength,
                                                 ENUMERATED {v0, v1},
    subframeNumber
    tddE-PUCH-Offset
                                                 TddE-PUCH-Offset,
    tdd-ChannelisationCode
                                                 TDD-ChannelisationCode,
    n-E-UCCHLCR
                                                 N-E-UCCH-LCR,
                                                 ProtocolExtensionContainer { { Initial-E-DCH-SPS-resource-ExtIEs } }
                                                                                                                                           OPTIONAL,
    iE-Extensions
    . . .
Initial-E-DCH-SPS-resource-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-DCH-SPS-HICH-Information ::= SEQUENCE {
    e-HICH-Configuration
                                                 E-HICH-Configuration,
    signatureSequenceGroupIndex
                                             SignatureSequenceGroupIndex,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-SPS-HICH-Information-ExtIEs } }
                                                                                                                                           OPTIONAL,
    . . .
E-DCH-SPS-HICH-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
E-HICH-Configuration ::= CHOICE {
    same-As-Scheduled-E-HICH
                                         Same-As-Scheduled-E-HICH,
    explicit
                                         E-HICH-InformationResp-ExplicitConfiguration-LCR,
    . . .
}
```

```
Same-As-Scheduled-E-HICH ::= SEQUENCE {
    e-HICH-EI
                                                 E-HICH-EI,
    . . .
E-HICH-InformationResp-ExplicitConfiguration-LCR ::= SEQUENCE {
    timeSlotLCR
                                                     TimeSlotLCR,
    midambleShiftLCR
                                                    MidambleShiftLCR,
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
                                                     ProtocolExtensionContainer { { E-HICH-InformationResp-ExplicitConfiguration-LCR-ExtIEs } }
   iE-Extensions
   OPTIONAL,
    . . .
3
E-HICH-InformationResp-ExplicitConfiguration-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- F
FACH-FlowControlInformation ::= SEQUENCE (SIZE (1..16)) OF FACH-FlowControlInformationItem
FACH-FlowControlInformationItem ::= SEQUENCE {
                                    SchedulingPrioritvIndicator,
    fACH-SchedulingPriority
   mAC-c-sh-SDU-Lengths
                                    MAC-c-sh-SDU-LengthList,
    fACH-InitialWindowSize
                                    FACH-InitialWindowSize,
    iE-Extensions
                                    ProtocolExtensionContainer { {FACH-FlowControlInformationItem-ExtIEs} } OPTIONAL,
    . . .
}
FACH-FlowControlInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
                                ::= INTEGER { unlimited(255) } (0..255)
FACH-InitialWindowSize
-- Number of frames MAC-c-sh SDUs.
-- 255 = Unlimited number of FACH data frames
FACH-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfFACHs)) OF FACH-InformationItem
FACH-InformationItem ::= SEQUENCE {
    transportFormatSet
                                    TransportFormatSet,
    iE-Extensions
                                    ProtocolExtensionContainer { { FACH-InformationItem-ExtIEs } } OPTIONAL,
    . . .
}
FACH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Fast-Reconfiguration-Mode ::= ENUMERATED {fast,...}
Fast-Reconfiguration-Permission ::= ENUMERATED {allowed,...}
```

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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 FDD-DCHs-to-ModifySpecificInformationList, iE-Extensions ProtocolExtensionContainer { {FDD-DCHs-to-ModifyItem-ExtIEs} } OPTIONAL, FDD-DCHs-to-ModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-TnlOos CRITICALITY ignore EXTENSION TnlOos PRESENCE optional }, . . . 3 FDD-DCHs-to-ModifySpecificInformationList ::= SEOUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifySpecificItem FDD-DCHs-to-ModifySpecificItem ::= SEQUENCE { dCH-TD DCH-ID, ul-TransportformatSet TransportFormatSet OPTIONAL, dl-TransportformatSet TransportFormatSet OPTIONAL, OPTIONAL, allocationRetentionPriority AllocationRetentionPriority frameHandlingPriority FrameHandlingPriority OPTIONAL, not-Used-dRACControl NULL OPTIONAL. iE-Extensions ProtocolExtensionContainer { {FDD-DCHs-to-ModifySpecificItem-ExtIEs} } OPTIONAL, . . . FDD-DCHs-to-ModifySpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-Guaranteed-Rate-Information CRITICALITY ignore EXTENSION Guaranteed-Rate-Information PRESENCE optional ID id-TrafficClass CRITICALITY ignore EXTENSION TrafficClass PRESENCE optional }| PRESENCE optional }. ID id-Unidirectional-DCH-Indicator CRITICALITY reject EXTENSION Unidirectional-DCH-Indicator . . . FDD-DL-ChannelisationCodeNumber ::= INTEGER (0..511) -- According to the mapping in TS 25.213 [27]. The maximum value is equal to the DL spreading factor -1--FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF FDD-DL-CodeInformationItem FDD-DL-CodeInformationItem ::= SEQUENCE { dl-ScramblingCode DL-ScramblingCode, fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber, transmission-Gap-Pattern-Sequence-ScramblingCode-Information Transmission-Gap-Pattern-Sequence-ScramblingCode-Information OPTIONAL, ProtocolExtensionContainer { {FDD-DL-CodeInformationItem-ExtIEs} } OPTIONAL, iE-Extensions FDD-DL-CodeInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . .

```
FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    step-size1-5,
    step-size2,
    . . .
ļ
SchedulingPriorityIndicator
                                        ::= INTEGER { lowest(0), highest(15) } (0..15)
F-DPCH-SlotFormat ::= INTEGER (0..9)
F-DPCH-SlotFormatSupportRequest ::= NULL
FirstRLS-Indicator ::= ENUMERATED {
    first-RLS,
    not-first-RLS
}
FNReportingIndicator ::= ENUMERATED {
    fN-reporting-required,
    fN-reporting-not-required
}
FPACH-Information ::= SEQUENCE
    timeSlotLCR
                                 TimeSlotLCR,
    tDD-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    midambleShiftLCR
                                MidambleShiftLCR,
    wΤ
                                INTEGER (1..4),
    . . .
FTPICH-Information ::= SEQUENCE {
    fTPICH-Offset
                                             FTPICH-Offset,
    iE-Extensions
                                             ProtocolExtensionContainer { { FTPICH-Information-ExtIEs } }
                                                                                                                   OPTIONAL,
    . . .
}
FTPICH-Information-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
FTPICH-SlotFormat ::= INTEGER (0..9,...)
FTPICH-Offset ::= INTEGER (0..149)
FTPICH-Information-Removal ::= ENUMERATED {
    remove,
    . . .
}
FTPICH-Information-To-Modify ::= SEQUENCE {
    fTPICH-Offset
                                             FTPICH-Offset
                                                                                  OPTIONAL,
```

```
ProtocolExtensionContainer { { FTPICH-Information-To-Modify-ExtIEs } }
    iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
FTPICH-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
FTPICH-Information-Reconf
                                ::=SEQUENCE{
    setup-Or-ConfigurationChange-Or-Removal-Of-FTPICH-Information
                                                                     Setup-Or-ConfigurationChange-Or-Removal-Of-FTPICH-Information,
    iE-Extensions
                                                                     ProtocolExtensionContainer { { FTPICH-Information-Reconf-ExtIEs } } OPTIONAL,
    . . .
}
FTPICH-Information-Reconf-ExtIEs
                                    RNSAP-PROTOCOL-EXTENSION ::=
    . . .
FTPICH-Reconfiguration-Information ::= SEQUENCE {
    fTPICH-SlotFormat
                                             FTPICH-SlotFormat
                                                                                  OPTIONAL,
    fTPICH-ChannelisationCodenumber
                                             FDD-DL-ChannelisationCodeNumber
                                                                                  OPTIONAL,
                                             ProtocolExtensionContainer { { FTPICH-Reconfiguration-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
l
FTPICH-Reconfiguration-Information-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
FTPICH-Information-Response ::= SEQUENCE {
    fTPICH-SlotFormat
                                             FTPICH-SlotFormat,
    fTPICH-ChannelisationCodenumber
                                             FDD-DL-ChannelisationCodeNumber,
    iE-Extensions
                                             ProtocolExtensionContainer { { FTPICH-Information-Response-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
FTPICH-Information-Response-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
FrameHandlingPriority
                                ::= INTEGER { lowest(0), highest(15) } (0..15)
FrameOffset
                        ::= INTEGER (0..255)
-- Frames
FrequencyBandIndicator
                         ::= ENUMERATED {
    bandI,
    bandII,
    bandIII,
    bandIV,
    bandV,
    bandVI,
    bandVII,
    bandVIII,
```

bandX, bandXI, bandXII, bandXIII, bandXIV, bandXV, bandXVI, bandXVII, bandXVIII, bandXIX, bandXX, bandXXI, bandXXII, ..., reserved23, reserved24, bandXXV, bandXXVI

bandIX,

-- G

3

```
GapLength
                       ::= INTEGER (1..14)
-- Unit Slot
GapDuration
                        ::= INTEGER (1..144,...)
-- Unit Frame
GA-Cell ::= SEQUENCE (SIZE (1..maxNrOfPoints)) OF
    SEQUENCE {
        cell-GAIgeographicalCoordinate
                                            GeographicalCoordinate,
       iE-Extensions
                                ProtocolExtensionContainer { {GA-Cell-ExtIEs} } OPTIONAL,
        . . .
GA-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GA-CellAdditionalShapes ::= CHOICE {
    pointWithUncertainty
                                                     GA-PointWithUnCertainty,
    pointWithUncertaintyEllipse
                                                     GA-PointWithUnCertaintyEllipse,
    pointWithAltitude
                                                     GA-PointWithAltitude,
    pointWithAltitudeAndUncertaintyEllipsoid
                                                     GA-PointWithAltitudeAndUncertaintyEllipsoid,
    ellipsoidArc
                                                     GA-EllipsoidArc,
    . . .
    }
GA-AltitudeAndDirection ::= SEQUENCE {
    directionOfAltitude
                           ENUMERATED {height, depth},
                            INTEGER (0..32767),
    altitude
    . . .
```

```
}
GA-EllipsoidArc ::= SEQUENCE {
    geographicalCoordinates
                                GeographicalCoordinate,
    innerRadius
                                INTEGER (0..65535),
    uncertaintyRadius
                                INTEGER (0..127),
    offsetAngle
                                INTEGER (0..179),
    includedAngle
                                INTEGER (0..179),
    confidence
                                INTEGER (0..127),
    iE-Extensions
                                ProtocolExtensionContainer { { GA-EllipsoidArc-ExtIEs } } OPTIONAL,
    . . .
GA-EllipsoidArc-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
3
GANSS-AddClockModels ::= CHOICE {
    navClockModel
                                     GANSS-NAVclockModel,
    cnavClockModel
                                     GANSS-CNAVclockModel,
    qlonassClockModel
                                    GANSS-GLONASSclockModel,
    sbasClockModel
                                    GANSS-SBASclockModel,
    . . .
GANSS-AddIonoModelReq ::= BIT STRING (SIZE(2))
GANSS-AddNavigationModelsReq ::= 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)),
    dataID
    alpha-beta-parameters
                                         GPS-Ionospheric-Model,
    ie-Extensions
                                         ProtocolExtensionContainer { { GANSS-Additional-Ionospheric-Model-ExtIEs } }
                                                                                                                           OPTIONAL,
    . . .
GANSS-Additional-Ionospheric-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-Additional-Navigation-Models ::= SEQUENCE {
    ganss-Transmission-Time
                                GANSS-Transmission-Time,
```

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OPTIONAL,

```
ENUMERATED { true }
    non-broadcastIndication
    ganssSatInfoNavList
                                Ganss-Sat-Info-AddNavList,
    ie-Extensions
                                ProtocolExtensionContainer { { GANSS-Additional-Navigation-Models-ExtIEs } } OPTIONAL,
    . . .
GANSS-Additional-Navigation-Models-ExtIEs RNSAP-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 {
    ganss-wk-number
                                     INTEGER(0..255),
    qANSS-AlmanacModel
                                     CHOICE {
        qANSS-keplerianParameters
                                         SEOUENCE {
            t-oa
                                             INTEGER(0..255),
            iod-a
                                             INTEGER(0..3),
            qANSS-SatelliteInformationKP
                                             GANSS-SatelliteInformationKP,
                                             ProtocolExtensionContainer { { GANSS-KeplerianParametersAlm-ExtIEs } } OPTIONAL,
            ie-Extensions
            . . .
        },
        . . . ,
        extension-GANSS-AlmanacModel
                                             Extension-GANSS-AlmanacModel
    },
                                     ProtocolExtensionContainer { { GANSS-Almanac-ExtIEs } }
    ie-Extensions
                                                                                                                       OPTIONAL,
    . . .
GANSS-KeplerianParametersAlm-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Extension-GANSS-AlmanacModel
                                ::= ProtocolIE-Single-Container {{ Extension-GANSS-AlmanacModel-IE }}
Extension-GANSS-AlmanacModel-IE RNSAP-PROTOCOL-IES ::= {
    { ID id-GANSS-alm-keplerianNAVAlmanac
                                                     CRITICALITY
                                                                      ignore
                                                                                  TYPE
                                                                                          GANSS-alm-keplerianNAVAlmanac
    PRESENCE
                mandatory}|
    { ID id-GANSS-alm-keplerianReducedAlmanac
                                                     CRITICALITY
                                                                      ignore
                                                                                  TYPE
                                                                                          GANSS-alm-keplerianReducedAlmanac
    PRESENCE
                mandatory}|
```

```
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                                                                          980
                                                                                                                        ETSI TS 125 423 V11.4.0 (2013-01)
    { ID id-GANSS-alm-keplerianMidiAlmanac
                                                     CRITICALITY
                                                                                  TYPE
                                                                                          GANSS-alm-keplerianMidiAlmanac
                                                                     iqnore
    PRESENCE
                mandatory}|
    { ID id-GANSS-alm-keplerianGLONASS
                                                     CRITICALITY
                                                                     ignore
                                                                                  TYPE
                                                                                          GANSS-alm-keplerianGLONASS
                mandatory}
    PRESENCE
    { ID id-GANSS-alm-ecefSBASAlmanac
                                                     CRITICALITY
                                                                     ignore
                                                                                  TYPE
                                                                                          GANSS-alm-ecefSBASAlmanac
    PRESENCE
                mandatory}
}
GANSS-alm-keplerianNAVAlmanac ::= SEQUENCE {
    t-oa
                                INTEGER (0..255),
    sat-info-NAVkpList
                                GANSS-SAT-Info-Almanac-NAVkpList,
    ie-Extensions
                                ProtocolExtensionContainer { { GANSS-ALM-NAVKeplerianSet-ExtIEs } }
                                                                                                                      OPTIONAL,
    . . .
GANSS-ALM-NAVKeplerianSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-alm-keplerianReducedAlmanac ::= SEQUENCE {
                                INTEGER (0..255),
    t-oa
    sat-info-REDkpList
                                GANSS-SAT-Info-Almanac-REDkpList,
    ie-Extensions
                                ProtocolExtensionContainer { { GANSS-ALM-ReducedKeplerianSet-ExtIEs } }
                                                                                                                      OPTIONAL,
    . . .
}
GANSS-ALM-ReducedKeplerianSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-alm-keplerianMidiAlmanac ::= SEQUENCE {
    t-oa
                                INTEGER (0..255),
    sat-info-MIDIkpList
                                GANSS-SAT-Info-Almanac-MIDIkpList,
    ie-Extensions
                                ProtocolExtensionContainer { { GANSS-ALM-MidiAlmanacSet-ExtIEs } }
                                                                                                                      OPTIONAL,
    . . .
}
GANSS-ALM-MidiAlmanacSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-alm-keplerianGLONASS ::= SEQUENCE {
    sat-info-GLOkpList
                                GANSS-SAT-Info-Almanac-GLOkpList,
```

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```

```
ProtocolExtensionContainer { { GANSS-ALM-GlonassAlmanacSet-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL,
    . . .
GANSS-ALM-GlonassAlmanacSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-alm-ecefSBASAlmanac ::= SEQUENCE {
    sat-info-SBASecefList
                                GANSS-SAT-Info-Almanac-SBASecefList,
   ie-Extensions
                                ProtocolExtensionContainer { { GANSS-ALM-ECEFsbasAlmanacSet-ExtIEs } }
                                                                                                                     OPTIONAL,
    . . .
}
GANSS-ALM-ECEFsbasAlmanacSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-Almanac-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-completeAlmanacProvided CRITICALITY
                                                    ignore EXTENSION CompleteAlmanacProvided PRESENCE
                                                                                                                     optional},
    . . .
}
GANSS-Auxiliary-Information ::= CHOICE {
                GANSS-AuxInfoGANSS-ID1,
                                            -- This choice may only be present if GANSS ID indicates Modernized GPS
    ganssID1
                GANSS-AuxInfoGANSS-ID3,
                                            -- This choice may only be present if GANSS ID indicates GLONASS
    qanssID3
    . . .
GANSS-AuxInfoGANSS-ID1 ::= SEQUENCE (SIZE(1.. maxGANSSSat)) OF SEQUENCE {
    svID
                       INTEGER(0..63),
    signalsAvailable BIT STRING (SIZE(8)),
   ie-Extensions
                       ProtocolExtensionContainer { { GANSS-AuxInfoGANSS-ID1-element-ExtIEs } } OPTIONAL,
    . . .
GANSS-AuxInfoGANSS-ID1-element-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-AuxInfoGANSS-ID3 ::= SEQUENCE (SIZE(1.. maxGANSSSat)) OF SEQUENCE {
    svID
                       INTEGER(0..63),
    signalsAvailable BIT STRING (SIZE(8)),
    channelNumber
                       INTEGER (-7..13),
    ie-Extensions
                        ProtocolExtensionContainer { { GANSS-AuxInfoGANSS-ID3-element-ExtIEs } } OPTIONAL,
    . . .
ļ
```

```
GANSS-AuxInfoGANSS-ID3-element-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-AuxInfoReg ::= BOOLEAN
GANSS-Clock-Model ::= SEQUENCE (SIZE (1..maxGANSSClockMod)) OF SEQUENCE
                                        BIT STRING (SIZE (14)),
    t-oc
    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,
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-ClockModelItem-ExtIEs } }
                                                                                                                     OPTIONAL,
    . . .
GANSS-ClockModelItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-CNAVclockModel ::= SEQUENCE {
    cnavToc
                BIT STRING (SIZE (11)),
    cnavTop
                       BIT STRING (SIZE (11)),
    cnavURA0
                       BIT STRING (SIZE (5)),
    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)),
                                                                                         OPTIONAL,
    cnavISCl1cp
                       BIT STRING (SIZE (13))
    cnavISC11cd
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISCl1ca
                       BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISC12c
                       BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
                       BIT STRING (SIZE (13))
    cnavISC15i5
                                                                                         OPTIONAL,
                       BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISC15q5
    ie-Extensions
                        ProtocolExtensionContainer { { GANSS-CNAVclockModel-ExtIEs } }
                                                                                        OPTIONAL,
    . . .
GANSS-CNAVclockModel-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-Common-Data ::= SEQUENCE {
    ganss-Ionospheric-Model
                                        GANSS-Ionospheric-Model
    OPTIONAL,
    ganss-Rx-Pos
                                        GANSS-RX-Pos
    OPTIONAL,
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-Common-Data-ExtIEs } }
                                                                                                                     OPTIONAL,
```

```
. . .
}
GANSS-Common-Data-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GANSS-Additional-Ionospheric-Model
                                                     CRITICALITY ignore EXTENSION GANSS-Additional-Ionospheric-Model
                                                                                                                           PRESENCE optional }|
    { ID id-GANSS-Earth-Orientation-Parameters
                                                     CRITICALITY ignore EXTENSION GANSS-Earth-Orientation-Parameters
                                                                                                                           PRESENCE optional },
    . . .
}
GANSS-CommonDataInfoReg ::= SEQUENCE {
    ionospheric-Model
                                         BOOLEAN
    OPTIONAL,
    ie-Extensions
                                         ProtocolExtensionContainer { { GANSS-CommonDataInfoReg-ExtIEs } }
                                                                                                                       OPTIONAL,
    . . .
GANSS-CommonDataInfoReq-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-AddIonoModelReq
                                         CRITICALITY ignore EXTENSION
                                                                         GANSS-AddIonoModelReq
    PRESENCE optional }
    {ID id-GANSS-EarthOrientParaReq
                                         CRITICALITY ignore EXTENSION
                                                                         GANSS-EarthOrientParaReq
                                                                                                                       PRESENCE optional } ,
    . . .
GANSS-Data-Bit-Assistance ::= SEQUENCE {
    ganssTod
                                         INTEGER (0..59,...),
    dataBitAssistancelist
                                         GANSS-DataBitAssistanceList,
    ie-Extensions
                                         ProtocolExtensionContainer { { GANSS-Data-Bit-Assistance-ExtIEs } }
                                                                                                                       OPTIONAL,
    . . .
GANSS-Data-Bit-Assistance-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-DataBitAssistanceList ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF GANSS-DataBitAssistanceItem
GANSS-DataBitAssistanceItem ::= SEQUENCE {
    satId
                                    INTEGER(0..63),
    dataBitAssistanceSgnList
                                    GANSS-DataBitAssistanceSgnList,
                                    ProtocolExtensionContainer { { GANSS-DataBitAssistanceItem-ExtIEs } }
    ie-Extensions
                                                                                                                       OPTIONAL,
    . . .
}
GANSS-DataBitAssistanceItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-DataBitAssistanceSqnList ::= SEQUENCE (SIZE (1..maxSqnType)) OF GANSS-DataBitAssistanceSqnItem
GANSS-DataBitAssistanceSgnItem ::= SEQUENCE {
```

```
ganss-SignalId
                            GANSS-Signal-ID,
    ganssDataBits
                            BIT STRING (SIZE (1..1024)),
                            ProtocolExtensionContainer { { GANSS-DataBitAssistanceSqnItem-ExtIEs } }
    ie-Extensions
                                                                                                                    OPTIONAL
    . . .
GANSS-DataBitAssistanceSqnItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-Data-Bit-Assistance-RegItem ::= SEQUENCE {
    ganssTod
                                            INTEGER (0..86399),
    ganss-Data-Bit-Assistance-RegList
                                            GANSS-Data-Bit-Assistance-ReqList,
    iE-Extensions
                                            ProtocolExtensionContainer { { GANSS-Data-Bit-Assistance-RegItem-ExtIEs } } OPTIONAL,
    . . .
GANSS-Data-Bit-Assistance-RegItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-Data-Bit-Assistance-ReqList ::= 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
                                            ProtocolExtensionContainer { { GANSS-Data-Bit-Assistance-RegList-ExtIEs } } OPTIONAL,
    . . .
}
GANSS-Data-Bit-Assistance-RegList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-Delta-T := INTEGER(-128..127)
GANSS-DeltaUT1 ::= SEQUENCE {
   b1
           BIT STRING (SIZE(11)),
    h2
                      BIT STRING (SIZE(10)),
                       ProtocolExtensionContainer { { GANSS-DeltaUT1-ExtIEs } }
    ie-Extensions
                                                                                    OPTIONAL,
    . . .
}
GANSS-DeltaUT1-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-Earth-Orientation-Parameters ::= SEQUENCE {
                    BIT STRING (SIZE (16)),
    teop
                       BIT STRING (SIZE (21)),
    pmX
    pmXdot
                     BIT STRING (SIZE (15)),
    pmY
                     BIT STRING (SIZE (21)),
    pmYdot
                      BIT STRING (SIZE (15)),
    deltaUT1
                       BIT STRING (SIZE (31)),
```

```
deltaUT1dot
                        BIT STRING (SIZE (19)),
    ie-Extensions
                        ProtocolExtensionContainer { { GANSS-Earth-Orientation-Parameters-ExtIEs } }
                                                                                                                      OPTIONAL.
    . . .
GANSS-Earth-Orientation-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
۱
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
                                                                                                                                          OPTIONAL,
                                                 BIT STRING (SIZE (9))
    ganss-UTC-Model
                                                 BOOLEAN
                                                                                                                                          OPTIONAL,
    ganss-Almanac
                                                 BOOLEAN
                                                                                                                                          OPTIONAL,
    ganss-Real-Time-Integrity
                                                 BOOLEAN
                                                                                                                                          OPTIONAL,
                                                 GANSS-Data-Bit-Assistance-RegItem
                                                                                                                                          OPTIONAL,
    ganss-Data-Bit-Assistance-Reg
                                                 ProtocolExtensionContainer { { GANSS-GenericDataInfoRegItem-ExtIEs } }
    ie-Extensions
                                                                                                                                  OPTIONAL,
    . . .
GANSS-GenericDataInfoReqItem-ExtIEs RNSAP-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,
```

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ganss-Real-Time-Integrity GANSS-Real-Time-Integrity OPTIONAL, ganss-Data-Bit-Assistance GANSS-Data-Bit-Assistance OPTIONAL, ProtocolExtensionContainer { { GANSS-Generic-DataItem-ExtIEs } } ie-Extensions OPTIONAL, . . . GANSS-Generic-DataItem-ExtIEs RNSAP-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 PRESENCE optional }, CRITICALITY ignore EXTENSION GANSS-SBAS-ID . . . 3 GANSS-GLONASSclockModel ::= SEQUENCE { BIT STRING (SIZE (22)), qloTau gloGamma BIT STRING (SIZE (11)), gloDeltaTau BIT STRING (SIZE (5)) OPTIONAL, ie-Extensions ProtocolExtensionContainer { { GANSS-GLONASSclockModel-ExtIEs } } OPTIONAL. . . . GANSS-GLONASSclockModel-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . GANSS-ID ::= INTEGER(0...7,...)GANSS-Information ::= SEQUENCE { qANSS-CommonDataInfoReq GANSS-CommonDataInfoReq OPTIONAL, gANSS-GenericDataInfoRegList GANSS-GenericDataInfoRegList OPTIONAL, ie-Extensions ProtocolExtensionContainer { { GANSS-Information-ExtIEs } } OPTIONAL, . . . GANSS-Information-ExtIEs RNSAP-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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-IonosphereRegionalStormFlags ::= SEQUENCE
    storm-flag-one
                                        BOOLEAN,
    storm-flag-two
                                        BOOLEAN,
    storm-flag-three
                                        BOOLEAN,
    storm-flag-four
                                        BOOLEAN,
    storm-flag-five
                                        BOOLEAN,
                                        ProtocolExtensionContainer { { GANSS-IonosphereRegionalStormFlags-ExtIEs } } OPTIONAL,
    ie-Extensions
    . . .
GANSS-IonosphereRegionalStormFlags-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-NAVclockModel ::= SEQUENCE {
   navToc
                        BIT STRING (SIZE (16)),
   navaf2
                          BIT STRING (SIZE (8)),
                         BIT STRING (SIZE (16)),
   navaf1
                         BIT STRING (SIZE (22)),
   navaf0
   navTqd
                           BIT STRING (SIZE (8)),
                         ProtocolExtensionContainer { { GANSS-NAVclockModel-ExtIEs } }
    ie-Extensions
                                                                                             OPTIONAL,
    . . .
}
GANSS-NAVclockModel-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-Navigation-Model-And-Time-Recovery ::= SEQUENCE {
    ganss-Transmission-Time
                                GANSS-Transmission-Time,
    non-broadcastIndication
                                ENUMERATED{true}
                                                        OPTIONAL,
    ganssSatInfoNav
                                GANSS-Sat-Info-Nav,
    ie-Extensions
                                ProtocolExtensionContainer { { GANSS-Navigation-Model-And-Time-Recovery-ExtlEs } } OPTIONAL,
    . . .
}
GANSS-Navigation-Model-And-Time-Recovery-ExtIEs RNSAP-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)),
     cnavDeltaNoBIT STRING (SIZE (17)),cnavDeltaNoDotBIT STRING (SIZE (23)),cnavMoBIT STRING (SIZE (33)),
    CnavMoBIT STRING (SIZE (33)),cnavEBIT STRING (SIZE (33)),cnavOmegaBIT STRING (SIZE (33)),cnavOMEGA0BIT STRING (SIZE (33)),cnavDeltaOmegaDotBIT STRING (SIZE (33)),cnavIoBIT STRING (SIZE (17)),cnavIoBIT STRING (SIZE (17)),cnavIoBIT STRING (SIZE (15)),cnavCisBIT STRING (SIZE (16)),cnavCisBIT STRING (SIZE (16)),cnavCrsBIT STRING (SIZE (16)),cnavCrsBIT STRING (SIZE (24)),cnavCusBIT STRING (SIZE (24)),cnavCusBIT STRING (SIZE (21)),cnavCucBIT STRING (SIZE (21)),
                              ProtocolExtensionContainer { { GANSS-NavModel-CNAVKeplerianSet-ExtIEs } }
      ie-Extensions
                                                                                                                                                                                    OPTIONAL,
      . . .
}
GANSS-NavModel-CNAVKeplerianSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      . . .
}
GANSS-NavModel-GLONASSecef ::= SEQUENCE {
      qloEn
                 BIT STRING (SIZE (5)),
                                  BIT STRING (SIZE(2)),
BIT STRING (SIZE (1)),
      qloP1
      qloP2
      qloM
                                       BIT STRING (SIZE (2))
      OPTIONAL,
                           BIT STRING (SIZE (27)),
BIT STRING (SIZE (24)),
BIT STRING (SIZE (24)),
BIT STRING (SIZE (5)),
BIT STRING (SIZE (27)),
BIT STRING (SIZE (24)),
BIT STRING (SIZE (25)),
      gloX
      qloXdot
      qloXdotdot
      aloY
      qloYdot
      qloYdotdot
                                    BIT STRING (SIZE (27)),
BIT STRING (SIZE (24)),
      qloZ
      qloZdot
      qloZdotdot
                                        BIT STRING (SIZE (5)),
                                          ProtocolExtensionContainer { { GANSS-NavModel-GLONASSecef-ExtIEs } }
      ie-Extensions
                                                                                                                                                                                    OPTIONAL,
      . . .
}
GANSS-NavModel-GLONASSecef-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      . . .
}
GANSS-NavModel-NAVKeplerianSet ::= SEQUENCE {
      navURA
                 BIT STRING (SIZE (4)),
      navFitFlaq
                                       BIT STRING (SIZE (1)),
      navToe
                                        BIT STRING (SIZE (16)),
```

```
navOmega
                               BIT STRING (SIZE (32)),
    navDeltaN
                               BIT STRING (SIZE (16)),
    navM0
                               BIT STRING (SIZE (32)),
                          BIT STRING (SIZE (24)),
    navOmegaADot
    navE
                            BIT STRING (SIZE (32)),
                         BIT STRING (SIZE (14)),
BIT STRING (SIZE (32)),
    navIDot
    navAPowerHalf
    navI0
                               BIT STRING (SIZE (32)),
    navOmegaA0
                               BIT STRING (SIZE (32)),
    navCrs
                               BIT STRING (SIZE (16)),
    navCis
                               BIT STRING (SIZE (16)),
                         BIT STRING (SIZE (16)),
BIT STRING (SIZE (16)),
BIT STRING (SIZE (16)),
    navCus
    navCrc
    navCic
    navCuc
                               BIT STRING (SIZE (16)),
                               ProtocolExtensionContainer { { GANSS-NavModel-NAVKeplerianSet-ExtIEs } }
    ie-Extensions
                                                                                                                                    OPTIONAL,
    . . .
GANSS-NavModel-NAVKeplerianSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-NavModel-SBASecef ::= SEOUENCE {
    -- 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 (30)),
BIT STRING (SIZE (30)),
    sbasXq
    sbasYq
                            BIT STRING (SIZE (30)),
                          BIT STRING (SIZE (25)),
BIT STRING (SIZE (17)),
BIT STRING (SIZE (17)),
BIT STRING (SIZE (17)),
BIT STRING (SIZE (18)),
    sbasZg
    sbasXgDot
    sbasYgDot
    sbasZgDot
                         BIT STRING (SIZE (10)),
BIT STRING (SIZE (10)),
BIT STRING (SIZE (10)),
    sbasXqDotDot
    sbaqYqDotDot
    sbasZqDotDot
                               BIT STRING (SIZE (10)),
                               ProtocolExtensionContainer { { GANSS-NavModel-SBASecef-ExtIEs } }
                                                                                                             OPTIONAL,
    ie-Extensions
     . . .
GANSS-NavModel-SBASecef-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-Orbit-Model ::= CHOICE {
    gANSS-keplerianParameters
                                             SEQUENCE {
                                                  BIT STRING (SIZE (14)),
        toe-nav
        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)),
```

```
BIT STRING (SIZE (32)),
        qanss-e-nav
        idot-nav
                                             BIT STRING (SIZE (14)),
        a-sgrt-nav
                                             BIT STRING (SIZE (32)),
        i-zero-nav
                                             BIT STRING (SIZE (32)),
                                             BIT STRING (SIZE (32)),
        omega-zero-nav
        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)),
        ie-Extensions
                                             ProtocolExtensionContainer { { GANSS-KeplerianParametersOrb-ExtIEs } }
                                                                                                                            OPTIONAL,
        . . .
    },
    . . .
GANSS-KeplerianParametersOrb-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
}
GANSS-Real-Time-Integrity ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF 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 RNSAP-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),
                             ProtocolExtensionContainer { { GANSS-RX-Pos-ExtIEs } } OPTIONAL,
    ie-Extensions
    . . .
GANSS-RX-Pos-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-SatelliteInformationKP ::= SEQUENCE (SIZE (1..maxGANSSSatAlmanac)) OF 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-sgrt-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 RNSAP-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
                                GANSS-AddClockModels,
    ganssAddOrbitModels
                                GANSS-AddOrbitModels,
    ie-Extensions
                                ProtocolExtensionContainer { { Ganss-Sat-Info-AddNavList-ExtIEs } } OPTIONAL,
    . . .
Ganss-Sat-Info-AddNavList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-SAT-Info-Almanac-GLOkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
    qloAlmNA
                           BIT STRING (SIZE(11)),
    gloAlmnA
                           BIT STRING (SIZE(5)),
    gloAlmHA
                          BIT STRING (SIZE(5)),
    gloAlmLambdaA
                           BIT STRING (SIZE(21)),
    gloAlmTlambdaA
                           BIT STRING (SIZE(21)),
    qloAlmDeltaIA
                            BIT STRING (SIZE(18)),
    qloAkmDeltaTA
                           BIT STRING (SIZE(22)),
    qloAlmDeltaTdotA
                           BIT STRING (SIZE(7)),
    qloAlmEpsilonA
                           BIT STRING (SIZE(15)),
                            BIT STRING (SIZE(16)),
    qloAlmOmegaA
    qloAlmTauA
                            BIT STRING (SIZE(10)),
    gloAlmCA
                            BIT STRING (SIZE(1)),
                            BIT STRING (SIZE(2))
    qloAlmMA
    OPTIONAL,
                            ProtocolExtensionContainer { { GANSS-SAT-Info-Almanac-GLOkp-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL,
    . . .
}
```

```
GANSS-SAT-Info-Almanac-GLOkp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     . . .
}
GANSS-SAT-Info-Almanac-MIDIkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
     svID
                   INTEGER(0..63),

    midiAlmE
    BIT STRING (SIZE (11)),

    midiAlmDeltaI
    BIT STRING (SIZE (11)),

                                BIT STRING (SIZE (11)),
BIT STRING (SIZE (17)),
     midiAlmOmegaDot
     midiAlmSgrtA
                           BIT STRING (SIZE (16)),
BIT STRING (SIZE (16)),
BIT STRING (SIZE (16)),
BIT STRING (SIZE (16)),
BIT STRING (SIZE (11)),
BIT STRING (SIZE (10)),
BIT STRING (SIZE (1)),
BIT STRING (SIZE (1)),
BIT STRING (SIZE (1)),
ProtocolExtensionContai
     midiAlmOmega0
     midiAlmOmega
     midiAlmMo
     midiAlmaf0
     mıdiAlmaf0
midiAlmaf1
     midiAlmL1Health
     midiAlmL2Health
     midiAlmL5Health
                                      ProtocolExtensionContainer { { GANSS-SAT-Info-Almanac-MIDIkp-ExtIEs } }
     ie-Extensions
                                                                                                                                                                   OPTIONAL
     . . .
3
GANSS-SAT-Info-Almanac-MIDIkp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     . . .
}
GANSS-SAT-Info-Almanac-NAVkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
     svID
                   INTEGER(0..63),
     navAlmE
                                      BIT STRING (SIZE (16)),
    navAlmEBIT STRING (SIZE (16)),navAlmDeltaIBIT STRING (SIZE (16)),navAlmOMEGADOTBIT STRING (SIZE (16)),navAlmSVHealthBIT STRING (SIZE (16)),navAlmSqrtABIT STRING (SIZE (24)),navAlmOMEGAOBIT STRING (SIZE (24)),navAlmOMEGAOBIT STRING (SIZE (24)),navAlmOMEGAOBIT STRING (SIZE (24)),
                                 BIT STRING (SIZE (24)),
BIT STRING (SIZE (24))
     navAlmOmega
     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 RNSAP-PROTOCOL-EXTENSION ::=
     . . .
}
GANSS-SAT-Info-Almanac-REDkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF 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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-SAT-Info-Almanac-SBASecefList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF 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)),
    sbasAlmZg
                           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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-Sat-Info-Nav ::= SEQUENCE (SIZE(1..maxGANSSSat)) OF SEQUENCE {
    satId
                                INTEGER(0..63),
    svHealth
                                BIT STRING (SIZE(5)),
    iod
                                BIT STRING (SIZE(10)),
    ganssClockModel
                                GANSS-Clock-Model,
    ganssOrbitModel
                                GANSS-Orbit-Model,
    ie-Extensions
                                ProtocolExtensionContainer { { GANSS-Sat-Info-Nav-ExtlEs } } OPTIONAL,
    . . .
}
GANSS-Sat-Info-Nav-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-SBAS-ID ::= ENUMERATED
```

```
waas,
                                eqnos,
                                msas,
                                qaqan,
                                 . . .
GANSS-SBASclockModel ::= SEQUENCE {
    sbasTo
                            BIT STRING (SIZE (13)),
    sbasAqfo
                            BIT STRING (SIZE (12)),
    sbasAqf1
                           BIT STRING (SIZE (8)),
                            ProtocolExtensionContainer { { GANSS-SBASclockModel-ExtIEs } } OPTIONAL,
    ie-Extensions
    . . .
GANSS-SBASclockModel-ExtIEs RNSAP-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),
    ganss-t-a1
                                        INTEGER(-8388608..8388607)
                                                                                                                      OPTIONAL,
                                        INTEGER(-64..63)
                                                                                                                      OPTIONAL,
    ganss-t-a2
                                         ENUMERATED{gps,...,galileo,qzss,glonass},
    qnss-to-id
    ganss-wk-number
                                        INTEGER(0..8191)
                                                                                                                      OPTIONAL,
                                        ProtocolExtensionContainer { { GANSS-Time-Model-ExtIEs } }
    ie-Extensions
                                                                                                                      OPTIONAL,
    . . .
GANSS-Time-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-ganss-Delta-T CRITICALITY
                                            ignore EXTENSION GANSS-Delta-T PRESENCE
                                                                                              optional},
    . . .
}
```

```
GANSS-Transmission-Time ::= SEQUENCE {
    ganssDay
                                INTEGER(0..8191)
    OPTIONAL,
    ganssTod
                                INTEGER(0..86399),
                                ProtocolExtensionContainer { { GANSS-Transmission-Time-ExtIEs } }
    ie-Extensions
   OPTIONAL,
    . . .
}
GANSS-Transmission-Time-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-UTC-Model ::= SEQUENCE {
                                        BIT STRING (SIZE (24)),
    a-one-utc
    a-zero-utc
                                        BIT STRING (SIZE (32)),
    t-ot-utc
                                        BIT STRING (SIZE (8)),
    w-n-t-utc
                                        BIT STRING (SIZE (8)),
    delta-t-ls-utc
                                        BIT STRING (SIZE (8)),
    w-n-lsf-utc
                                        BIT STRING (SIZE (8)),
    dn-utc
                                        BIT STRING (SIZE (8)),
    delta-t-lsf-utc
                                        BIT STRING (SIZE (8)),
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-UTC-Model-ExtIEs } }
                                                                                                                     OPTIONAL,
    . . .
GANSS-UTC-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-UTCmodelSet1 ::= SEQUENCE {
    utcA0
                       BIT STRING (SIZE(16)),
    utcA1
                       BIT STRING (SIZE(13)),
    utcA2
                       BIT STRING (SIZE(7)),
    utcDeltaTls
                       BIT STRING (SIZE(8)),
   utcTot
                       BIT STRING (SIZE(16)),
    utcWNot
                       BIT STRING (SIZE(13)),
                       BIT STRING (SIZE(8)),
    utcWNlsf
    utcDN
                       BIT STRING (SIZE(4)),
    utcDeltaTlsf
                     BIT STRING (SIZE(8)),
    ie-Extensions
                       ProtocolExtensionContainer { { GANSS-UTCmodelSet1-ExtIEs } }
                                                                                       OPTIONAL,
    . . .
GANSS-UTCmodelSet1-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GANSS-UTCmodelSet2 ::= SEQUENCE {
   nA
                       BIT STRING (SIZE(11)),
```

}

```
BIT STRING (SIZE(32)),
    tauC
    deltaUT1
                        GANSS-DeltaUT1
                                                                                           OPTIONAL,
    kp
                        BIT STRING (SIZE(2))
                                                                                           OPTIONAL,
    ie-Extensions
                        ProtocolExtensionContainer { { GANSS-UTCmodelSet2-ExtIEs } }
                                                                                           OPTIONAL,
    . . .
}
GANSS-UTCmodelSet2-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-UTCmodelSet3 ::= SEOUENCE {
    utcA1wnt
                        BIT STRING (SIZE(24)),
    utcA0wnt
                        BIT STRING (SIZE(32)),
                        BIT STRING (SIZE(8)),
    utcTot
    utcWNt
                        BIT STRING (SIZE(8)),
    utcDeltaTls
                        BIT STRING (SIZE(8)),
                        BIT STRING (SIZE(8)),
    utcWNlsf
    utcDN
                        BIT STRING (SIZE(8)),
    utcDeltaTlsf
                        BIT STRING (SIZE(8)),
    utcStandardID
                        BIT STRING (SIZE(3)),
                        ProtocolExtensionContainer { { GANSS-UTCmodelSet3-ExtIEs } }
    ie-Extensions
                                                                                          OPTIONAL,
    . . .
GANSS-UTCmodelSet3-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GA-PointWithAltitude ::= SEQUENCE {
    geographicalCoordinates
                                 GeographicalCoordinate,
    altitudeAndDirection
                                GA-AltitudeAndDirection,
    iE-Extensions
                                ProtocolExtensionContainer { { GA-PointWithAltitude-ExtIEs } } OPTIONAL,
    . . .
GA-PointWithAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GA-PointWithAltitudeAndUncertaintyEllipsoid ::= SEQUENCE {
    geographicalCoordinates
                                GeographicalCoordinate,
    altitudeAndDirection
                                GA-AltitudeAndDirection,
    uncertaintyEllipse
                                GA-UncertaintyEllipse,
    uncertaintyAltitude
                                INTEGER (0..127),
    confidence
                                INTEGER (0..127),
                                ProtocolExtensionContainer { { GA-PointWithAltitudeAndUncertaintyEllipsoid-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
GA-PointWithAltitudeAndUncertaintyEllipsoid-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
GA-PointWithUnCertaintyEllipse ::= SEQUENCE {
    geographicalCoordinates
                               GeographicalCoordinate,
    uncertaintyEllipse
                               GA-UncertaintyEllipse,
    confidence
                               INTEGER (0..127),
                               ProtocolExtensionContainer { { GA-PointWithUnCertaintyEllipse-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
GA-PointWithUnCertaintyEllipse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GA-UncertaintyEllipse ::= SEQUENCE {
    uncertaintySemi-major
                               INTEGER (0..127),
    uncertaintySemi-minor
                               INTEGER (0..127),
    orientationOfMajorAxis
                               INTEGER (0..179), -- The values 90..179 shall not be used.
    . . .
}
GA-PointWithUnCertainty ::=SEQUENCE {
    geographicalCoordinates
                               GeographicalCoordinate,
    uncertaintyCode
                      INTEGER (0..127),
                           ProtocolExtensionContainer { {GA-PointWithUnCertainty-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
}
GA-PointWithUnCertainty-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GA-AccessPointPosition ::= SEQUENCE {
    geographicalCoordinate
                               GeographicalCoordinate,
   iE-Extensions
                   ProtocolExtensionContainer { {GA-AccessPoint-ExtIEs} } OPTIONAL,
    . . .
GA-AccessPoint-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GeographicalCoordinate ::= SEQUENCE {
   latitudeSign
                  ENUMERATED { north, south },
   latitude
                     INTEGER (0..8388607),
   longitude INTEGER (-8388608..8388607),
                      ProtocolExtensionContainer { {GeographicalCoordinate-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
}
GeographicalCoordinate-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GERAN-Cell-Capability ::= BIT STRING (SIZE (16))
```

**ETSI** 

```
998
```

```
-- First bit: A/Gb mode --
-- Second bit: Iu mode --
-- Note: 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. -
GERAN-Classmark ::=
                            OCTET STRING
    -- GERAN Classmark as defined in (38) --
GERAN-SI-Type ::= CHOICE {
    sI
                                GERAN-SystemInfo,
                                GERAN-SystemInfo,
   pSI
    . . .
GERAN-SystemInfo ::= SEQUENCE (SIZE (1..maxNrOfGERANSI)) OF
        SEQUENCE {
           gERAN-SI-block
                                OCTET STRING (SIZE (1..23)),
           iE-Extensions
                                ProtocolExtensionContainer { { GERAN-SystemInfo-ExtIEs } }
                                                                                                 OPTIONAL,
            . . .
}
GERAN-SystemInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GenericTrafficCategory ::= BIT STRING (SIZE (8))
GPS-Almanac ::= SEQUENCE {
    wn<sub>a</sub>-alm
                            BIT STRING (SIZE (8)),
    satellite-Almanac-Information
                                        SEQUENCE (SIZE (1..maxNoSat)) OF
        SEQUENCE {
            dATA-ID
                                DATA-ID,
            sAT-ID
                                SAT-ID,
            qps-e-alm
                                BIT STRING (SIZE (16)),
                                BIT STRING (SIZE (8)),
           qps-toa-alm
            qps-delta-I-alm BIT STRING (SIZE (16)),
            omegadot-alm
                                BIT STRING (SIZE (16)),
            svhealth-alm
                                BIT STRING (SIZE (8)),
            qps-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
                                ProtocolExtensionContainer { { Satellite-Almanac-Information-ExtIEs } }
                                                                                                                  OPTIONAL,
            . . .
       },
    -- This GPS-Almanac-Information is for the 1<sup>st</sup> 16 satellites
                           BIT STRING (SIZE (364))
    sVGlobalHealth-alm
                                                        OPTIONAL,
                            ProtocolExtensionContainer { { GPS-Almanac-ExtIEs } }
    iE-Extensions
                                                                                         OPTIONAL,
    . . .
}
Satellite-Almanac-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
}
GPS-Almanac-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Satellite-Almanac-Information-ExtItem CRITICALITY ignore EXTENSION Satellite-Almanac-Information-ExtItem
                                                                                                                                        PRESENCE
    optional}
    { ID id-completeAlmanacProvided
                                                    CRITICALITY ignore EXTENSION CompleteAlmanacProvided
    PRESENCE optional },
    . . .
}
Satellite-Almanac-Information-ExtItem ::= SEQUENCE (SIZE (1..maxNrOfSatAlmanac-maxNoSat)) OF
        SEQUENCE {
            data-id
                                DATA-ID,
            sAT-ID
                               SAT-ID.
           gps-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)),
            qps-omega-alm
                               BIT STRING (SIZE (24)),
           qps-af-zero-alm
                               BIT STRING (SIZE (11)),
            qps-af-one-alm
                               BIT STRING (SIZE (11)),
            iE-Extensions
                                ProtocolExtensionContainer { { Satellite-Almanac-Information-ExtItemIEs } }
                                                                                                                         OPTIONAL,
            . . .
-- Includes the GPS-Almanac-Information for the 17<sup>th</sup> through 32<sup>nd</sup> satellites.
Satellite-Almanac-Information-ExtItemIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GPSInformation ::= SEQUENCE (SIZE (1..maxNoGPSTypes)) OF
    SEOUENCE {
                                ENUMERATED {
       qPSInformationItem
            gPS-NavigationModel-and-TimeRecovery,
            gPS-Ionospheric-Model,
           gPS-UTC-Model,
           gPS-Almanac,
            gPS-RealTime-Integrity,
            . . .
        },
        iE-Extensions
                                ProtocolExtensionContainer { { GPSInformation-ExtIEs } }
                                                                                             OPTIONAL.
        . . .
-- This IE shall be present if the Information Type IE indicates 'GPS Information'
GPSInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GPS-NavigationModel-and-TimeRecovery ::= SEQUENCE (SIZE (1..maxNoSat)) OF
    SEQUENCE
        tx-tow-nav
                                        INTEGER (0..1048575),
        sAT-ID
                                        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)),
        iodc-nav
                                        BIT STRING (SIZE (10)),
       12-p-dataflag-nav
                                        BIT STRING (SIZE (1)),
        sfl-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)),
        gps-e-nav
                                        BIT STRING (SIZE (32)),
        c-us-nav
                                        BIT STRING (SIZE (16)),
        a-sqrt-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)),
        gps-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-NavigationModel-and-TimeRecoveryItem-ExtIEs } }
        iE-Extensions
                                                                                                                                         OPTIONAL,
        . . .
    }
GPS-NavigationModel-and-TimeRecoveryItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GPS-RealTime-Integrity ::= CHOICE {
    badSatellites
                                BadSatellites,
    noBadSatellite
                                NULL
}
GPS-RX-POS ::= SEQUENCE {
    geographicalCoordinate
                                GeographicalCoordinate,
    altitudeAndDirection
                                GA-AltitudeAndDirection,
    iE-Extensions
                                ProtocolExtensionContainer { { GPS-RX-POS-ExtIEs } } OPTIONAL,
    . . .
}
GPS-RX-POS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
GPS-Status-Health ::= ENUMERATED {
  udre-1-0.
  udre-0-75,
  udre-0-5,
  udre-0-3,
  udre-0-1,
  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)),
    delta-t-lsf-utc
                            BIT STRING (SIZE (8)),
                            ProtocolExtensionContainer { { GPS-UTC-Model-ExtIEs } }
    iE-Extensions
                                                                                         OPTIONAL,
    . . .
}
GPS-UTC-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
```

```
Guaranteed-Rate-Information ::= SEQUENCE {
```

```
quaranteed-UL-Rate
                                Guaranteed-Rate OPTIONAL,
    quaranteed-DL-Rate
                                Guaranteed-Rate OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { {Guaranteed-Rate-Information-ExtIEs} } OPTIONAL,
    . . .
Guaranteed-Rate-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Guaranteed-Rate
                    ::= INTEGER (1..maxNrOfTFs)
-- "1": TFI 0, "2": TFI 1, "3": TFI 2, ...
-- H
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 { { HARO-MemoryPartitioning-Implicit-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
}
HARQ-MemoryPartitioning-Implicit-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
HARQ-MemoryPartitioning-Explicit
                                  ::= SEQUENCE {
    hARO-MemoryPartitioningList
                                        HARO-MemoryPartitioningList,
    iE-Extensions
                                        ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Explicit-ExtIEs } }
                                                                                                                                         OPTIONAL,
    . . .
}
HARQ-MemoryPartitioning-Explicit-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-HARQ-MemoryPartitioningInfoExtForMIMO
                                                   CRITICALITY ignore EXTENSION HARQ-MemoryPartitioningInfoExtForMIMO PRESENCE optional},
    . . .
}
HARQ-MemoryPartitioningList ::= SEQUENCE (SIZE (1..maxNrOfHARQProc)) OF HARQ-MemoryPartitioningItem
HARQ-MemoryPartitioningInfoExtForMIMO ::= SEQUENCE (SIZE (4 | 6 | 8)) OF HARQ-MemoryPartitioningItem
HARQ-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 { { HARO-MemoryPartitioningItem-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
HARO-MemoryPartitioningItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
HARQ-Preamble-Mode ::= ENUMERATED {
  mode0,
   mode1
l
HARO-Process-Allocation-2ms-EDCH ::= BIT STRING ( SIZE(maxNrOfEDCHHAROProcesses2msEDCH)
HARO-Preamble-Mode-Activation-Indicator ::=ENUMERATED
    hargPreambleModeSupported
3
HCS-Prio ::= INTEGER (0..7)
-- 0 = lowest priority, ...7 = highest priority
HSDSCH-Configured-Indicator ::= ENUMERATED {
    configured-HS-DSCH,
    no-configured-HS-DSCH
}
HSDSCH-FDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlows-Information
                                                HSDSCH-MACdFlows-Information,
    uE-Capabilities-Info
                                                UE-Capabilities-Info,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                MAChsReorderingBufferSize-for-RLC-UM,
    cqiFeedback-CycleK
                                                CQI-Feedback-Cycle,
    cgiRepetitionFactor
                                                COI-RepetitionFactor
                                                                                             OPTIONAL.
    -- This IE shall be present if the CQI Feedback Cycle k IE is set to a value greater than 0.
    ackNackRepetitionFactor
                                                AckNack-RepetitionFactor,
    cqiPowerOffset
                                                COI-Power-Offset,
    ackPowerOffset
                                                Ack-Power-Offset,
    nackPowerOffset
                                                Nack-Power-Offset,
    hsscch-PowerOffset
                                                HSSCCH-PowerOffset
                                                                                             OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs } }
                                                                                                                                 OPTIONAL,
    . . .
```

HSDSCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-HARO-Preamble-Mode CRITICALITY ignore EXTENSION HARO-Preamble-Mode PRESENCE optional} ID id-MIMO-ActivationIndicator CRITICALITY reject EXTENSION MIMO-ActivationIndicator PRESENCE optional } ID id-HSDSCH-MACdPDUSizeFormat CRITICALITY reject EXTENSION HSDSCH-MACdPDUSizeFormat PRESENCE optional } CRITICALITY ignore EXTENSION SixtyfourOAM-UsageAllowedIndicator PRESENCE optional } ID id-SixtyfourQAM-UsageAllowedIndicator ID id-UE-with-enhanced-HS-SCCH-support-indicator CRITICALITY ignore EXTENSION NULL PRESENCE optional } ID id-EnhancedHSServingCC-Abort CRITICALITY reject EXTENSION EnhancedHSServingCC-Abort PRESENCE optional } ID id-UE-SupportIndicatorExtension CRITICALITY ignore EXTENSION UE-SupportIndicatorExtension PRESENCE optional } ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator PRESENCE optional } | ID id-Single-Stream-MIMO-ActivationIndicator CRITICALITY reject EXTENSION Single-Stream-MIMO-ActivationIndicator PRESENCE optional } { ID id-MIMO-withfourtransmitantennas-ActivationIndicator CRITICALITY reject EXTENSION MIMO-withfourtransmitantennas-ActivationIndicator PRESENCE optional } { ID id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator CRITICALITY reject EXTENSION DualStream-MIMO-withfourtransmitantennas-ActivationIndicator PRESENCE optional } | { ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasRequestIndicator PRESENCE optional } { ID id-Multiflow-Information CRITICALITY reject EXTENSION Multiflow-Information PRESENCE optional }, . . . HSDSCH-FDD-Information-Response ::= SEQUENCE { hSDSCH-MACdFlow-Specific-InfoList-Response HSDSCH-MACdFlow-Specific-InfoList-Response OPTIONAL, hSSCCH-Specific-InfoList-Response HSSCCH-FDD-Specific-InfoList-Response OPTIONAL, hSPDSCH-and-HSSCCH-ScramblingCode DL-ScramblingCode OPTIONAL, measurement-Power-Offset Measurement-Power-Offset OPTIONAL, hARQ-MemoryPartitioning HARQ-MemoryPartitioning OPTIONAL. ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } } OPTIONAL, iE-Extensions . . . HSDSCH-FDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-User-Plane-Congestion-Fields-Inclusion PRESENCE optional } CRITICALITY ignore EXTENSION User-Plane-Congestion-Fields-Inclusion ID id-HARO-Preamble-Mode-Activation-Indicator CRITICALITY ignore EXTENSION HARQ-Preamble-Mode-Activation-Indicator PRESENCE optional } ID id-MIMO-InformationResponse CRITICALITY ignore EXTENSION MIMO-InformationResponse 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 } CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMO ID id-power-offset-for-S-CPICH-for-MIMO PRESENCE optional } ID id-Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order CRITICALITY ignore EXTENSION Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order PRESENCE optional} { ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennas PRESENCE optional }, HS-DSCH-FDD-Secondary-Serving-Information ::= SEQUENCE hsscch-PowerOffset HSSCCH-PowerOffset OPTIONAL, sixtyfourQAM-UsageAllowedIndicator SixtyfourQAM-UsageAllowedIndicator OPTIONAL,

	iE-Extensions OPTIONAL,	<pre>ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-ExtIEs } }</pre>	
}			
{ID {ID {ID {ID	id-DiversityMode id-TransmitDiversityIndicator	<pre>ktlEs RNSAP-PROTOCOL-EXTENSION ::= {         CRITICALITY reject EXTENSION MIMO-ActivationIndicator         CRITICALITY reject EXTENSION Single-Stream-MIMO-Activa         CRITICALITY reject EXTENSION DiversityMode         CRITICALITY reject EXTENSION TransmitDiversityIndicate         quest-Indicator CRITICALITY ignore EXTENSION PowerOffsetFerence</pre>	PRESENCE optional }   or PRESENCE optional }
<pre>{ID {ID Act {ID Pow</pre>	id-OrdinalNumberOfFrequency id-MIMO-withfourtransmitantennas-Activa PRESENCE optional}  id-DualStream-MIMO-withfourtransmitante ivationIndicator PRESENCE optional}	nnas-ActivationIndicator CRITICALITY reject EXTENSION Dual: chfourtransmitantennas-Request-Indicator CRITICALITY ignore	rtransmitantennas-ActivationIndicator Stream-MIMO-withfourtransmitantennas- EXTENSION
} HS-	DSCH-FDD-Secondary-Serving-Information-R hSSCCH-Specific-InfoList-Response hSPDSCH-and-HSSCCH-ScramblingCode measurement-Power-Offset sixtyfourQAM-DL-UsageIndicator hSDSCH-TBSizeTableIndicator iE-Extensions OPTIONAL, 	esponse ::= SEQUENCE { HSSCCH-FDD-Specific-InfoList-Response DL-ScramblingCode Measurement-Power-Offset SixtyfourQAM-DL-UsageIndicator HSDSCH-TBSizeTableIndicator ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Servin	OPTIONAL, OPTIONAL, OPTIONAL, OPTIONAL, OPTIONAL, ng-Information-Respons-ExtIEs } }
{ID {ID {ID	DSCH-FDD-Secondary-Serving-Information-R id-MIMO-InformationResponse id-power-offset-for-S-CPICH-for-MIMO id-power-offset-for-S-CPICH-for-MIMO-wi erOffsetForSecondaryCPICHforMIMOwithfour 	5	PRESENCE optional}  forMIMO PRESENCE optional}
HS-	DSCH-Secondary-Serving-Information-To-Mo hsscch-PowerOffset hSSCCH-CodeChangeGrant sixtyfourQAM-UsageAllowedIndicator iE-Extensions OPTIONAL, 	<pre>dify ::= SEQUENCE {     HSSCCH-PowerOffset OPTIC     HSSCCH-Code-Change-Grant OPTIC     SixtyfourQAM-UsageAllowedIndicator OPTIC     ProtocolExtensionContainer { { HS-DSCH-Secondary-Service } </pre>	NAL, NAL,
{ID	DSCH-Secondary-Serving-Information-To-Mo id-MIMO-Mode-Indicator id-Single-Stream-MIMO-Mode-Indicator	dify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { CRITICALITY reject EXTENSION MIMO-Mode-Indicator CRITICALITY reject EXTENSION Single-Stream-MIMO-Mu	PRESENCE optional} ode-Indicator PRESENCE optional}

{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 EXTENSION NonCellSpecificTxDiversity PRESENCE optional } {ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator PRESENCE optional } {ID id-OrdinalNumberOfFrequency PRESENCE optional} CRITICALITY reject EXTENSION OrdinalNumberOfFrequency {ID id-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional} {ID id-DualStream-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION DualStream-MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional } {ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasRequestIndicator PRESENCE optional } {ID id-Multiflow-OrdinalNumberOfFrequency CRITICALITY reject EXTENSION Multiflow-OrdinalNumberOfFrequency PRESENCE optional }, . . . } HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised ::= SEQUENCE { hsscch-PowerOffset HSSCCH-PowerOffset OPTIONAL, sixtyfourOAM-UsageAllowedIndicator SixtyfourOAM-UsageAllowedIndicator OPTIONAL, ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised-ExtIEs } } iE-Extensions OPTIONAL, . . . HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= { {ID id-MIMO-Mode-Indicator CRITICALITY reject EXTENSION MIMO-Mode-Indicator PRESENCE optional } ID id-Single-Stream-MIMO-Mode-Indicator CRITICALITY reject EXTENSION Single-Stream-MIMO-Mode-Indicator PRESENCE optional } {ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator PRESENCE optional } {ID id-OrdinalNumberOfFrequency CRITICALITY reject EXTENSION OrdinalNumberOfFrequency PRESENCE optional } {ID id-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional} {ID id-DualStream-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION DualStream-MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional } | {ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasReguestIndicator PRESENCE optional } {ID id-Multiflow-OrdinalNumberOfFrequency CRITICALITY reject EXTENSION Multiflow-OrdinalNumberOfFrequency PRESENCE optional }, . . . } 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-ExtIEs RNSAP-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 RNSAP-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 ::= SEOUENCE {
    hS-DSCH-FDD-Secondary-Serving-Information-Response
                                                             HS-DSCH-FDD-Secondary-Serving-Information-Response,
    hSDSCH-RNTI
                                                             HSDSCH-RNTI,
                                         ProtocolExtensionContainer { { HS-Secondary-Serving-cell-change-successful-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
HS-Secondary-Serving-cell-change-successful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HS-Secondary-Serving-cell-change-unsuccessful ::= SEQUENCE {
    cause
                                     Cause,
                                    ProtocolExtensionContainer { { HS-Secondary-Serving-cell-change-unsuccessful-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
HS-Secondary-Serving-cell-change-unsuccessful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HS-DSCH-Secondary-Serving-Remove ::= NULL
HSDSCH-Information-to-Modify ::= SEQUENCE
    hSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                     HSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                           OPTIONAL,
    priorityQueue-Info-to-Modify
                                                     PriorityQueue-InfoList-to-Modify
                                                                                                           OPTIONAL,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                     MAChsReorderingBufferSize-for-RLC-UM
                                                                                                           OPTIONAL,
                                                     CQI-Feedback-Cycle
    cqiFeedback-CycleK
                                                                                                                           -- For FDD only
                                                                                                           OPTIONAL,
                                                     CQI-RepetitionFactor
    cgiRepetitionFactor
                                                                                                                           -- For FDD only
                                                                                                           OPTIONAL,
    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
                                                                                                                           -- For FDD only
                                                                                                           OPTIONAL,
    hSSCCH-CodeChangeGrant
                                                     HSSCCH-Code-Change-Grant
                                                                                                           OPTIONAL,
    tDDAckNackPowerOffset
                                                     TDD-AckNack-Power-Offset
                                                                                                           OPTIONAL,
                                                                                                                           -- For TDD only
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-ExtIEs
                                                                                                                         } }
    OPTIONAL,
```

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. . .
```

HSDSCH-Information-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-HARO-Preamble-Mode CRITICALITY ignore EXTENSION HARO-Preamble-Mode PRESENCE optional } ID id-HS-PDSCH-Code-Change-Grant CRITICALITY ignore EXTENSION HS-PDSCH-Code-Change-Grant PRESENCE optional } -- 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-SixtyfourQAM-UsageAllowedIndicator CRITICALITY ignore EXTENSION SixtyfourQAM-UsageAllowedIndicator PRESENCE optional } CRITICALITY ignore EXTENSION UE-Capabilities-Info ID id-UE-Capabilities-Info PRESENCE optional } ID id-EnhancedHSServingCC-Abort CRITICALITY reject EXTENSION EnhancedHSServingCC-Abort PRESENCE optional } ID id-UE-SupportIndicatorExtension CRITICALITY ignore EXTENSION UE-SupportIndicatorExtension PRESENCE optional } ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMOReguestIndicator PRESENCE optional } | ID id-Single-Stream-MIMO-Mode-Indicator CRITICALITY reject EXTENSION Single-Stream-MIMO-Mode-Indicator PRESENCE optional } ID id-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional } ID id-DualStream-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION DualStream-MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional } { ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator CRITICALITY ignore EXTENSION  ${\tt PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasRequestIndicator}$ PRESENCE optional} { ID id-Multiflow-Reconfiguration CRITICALITY reject EXTENSION Multiflow-Reconfiguration PRESENCE optional }, . . . HSDSCH-Information-to-Modify-Unsynchronised ::= SEQUENCE { hSDSCH-MACdFlow-Specific-InfoList-to-Modify HSDSCH-MACdFlow-Specific-InfoList-to-Modify OPTIONAL. PriorityQueue-InfoList-to-Modify-Unsynchronised priorityQueueInfotoModifyUnsynchronised OPTIONAL, cgiPowerOffset COI-Power-Offset OPTIONAL, -- For FDD only ackPowerOffset Ack-Power-Offset OPTIONAL, -- For FDD only nackPowerOffset Nack-Power-Offset -- For FDD only OPTIONAL, -- Only for FDD hsscch-PowerOffset 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 RNSAP-PROTOCOL-EXTENSION ::= { ID id-HARO-Preamble-Mode CRITICALITY ignore EXTENSION HARO-Preamble-Mode PRESENCE optional } ID id-MIMO-Mode-Indicator CRITICALITY reject EXTENSION MIMO-Mode-Indicator PRESENCE optional} ID id-SixtyfourQAM-UsageAllowedIndicator CRITICALITY ignore EXTENSION SixtyfourQAM-UsageAllowedIndicator PRESENCE optional} ID id-EnhancedHSServingCC-Abort CRITICALITY reject EXTENSION EnhancedHSServingCC-Abort PRESENCE optional } ID id-UE-SupportIndicatorExtension CRITICALITY ignore EXTENSION UE-SupportIndicatorExtension PRESENCE optional } ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator PRESENCE optional} ID id-Single-Stream-MIMO-Mode-Indicator CRITICALITY reject EXTENSION Single-Stream-MIMO-Mode-Indicator PRESENCE optional } | CRITICALITY reject EXTENSION MIMO-withfourtransmitantennas-ModeIndicator ID id-MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional } | { ID id-DualStream-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION DualStream-MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional } | { ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator CRITICALITY ignore EXTENSION  ${\tt PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasRequestIndicator}$ PRESENCE optional } { ID id-Multiflow-Reconfiguration CRITICALITY reject EXTENSION Multiflow-Reconfiguration PRESENCE optional }, . . .

```
}
HSDSCH-MACdFlow-ID ::= INTEGER (0. maxNrOfMACdFlows-1)
HSDSCH-MACdFlow-Specific-InfoList := SEOUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem
HSDSCH-MACdPDUSizeFormat ::= ENUMERATED {
    indexedMACdPDU-Size,
    flexibleMACdPDU-Size
}
HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    hSDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
    trafficClass
                                        TrafficClass,
    bindingID
                                        BindingID
                                                                                 OPTIONAL,
                                        TransportLayerAddress
    transportLayerAddress
                                                                                 OPTIONAL,
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs } }
    iE-Extensions
                                                                                                                                        OPTIONAL,
    . . .
HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                           CRITICALITY iqnore
                                                   EXTENSION TnlQos PRESENCE optional }
    {ID id-TnlQos
    {ID id-TrCH-SrcStatisticsDescr CRITICALITY iqnore EXTENSION TrCH-SrcStatisticsDescr PRESENCE optional },
    . . .
3
HSDSCH-MACdFlow-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoList-Response
HSDSCH-MACdFlow-Specific-InfoItem-Response ::= SEQUENCE {
    hSDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
   bindingID
                                        BindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                        TransportLayerAddress
                                                                                 OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation HSDSCH-Initial-Capacity-Allocation
                                                                                OPTIONAL,
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs } }
    iE-Extensions
   OPTIONAL,
    . . .
HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
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,
    trafficClass
                                        TrafficClass
                                                                                 OPTIONAL,
    bindingID
                                        BindingID
                                                                                 OPTIONAL,
                                        TransportLayerAddress
    transportLayerAddress
                                                                                 OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs } }
    OPTIONAL,
```

```
. . .
}
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlOos
                           CRITICALITY ignore
                                                    EXTENSION ThlOos PRESENCE optional },
    . . .
}
HSDSCH-MACdFlows-Information ::= SEQUENCE {
                                                    HSDSCH-MACdFlow-Specific-InfoList,
    hSDSCH-MACdFlow-Specific-Info
   priorityQueue-Info
                                                    PriorityQueue-InfoList,
                                                    ProtocolExtensionContainer { { HSDSCH-MACdFlows-Information-ExtIEs } }
   iE-Extensions
    OPTIONAL,
    . . .
}
HSDSCH-MACdFlows-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
}
HSDSCH-MACdFlows-to-Delete ::= SEQUENCE (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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HSDSCH-Initial-Capacity-Allocation::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF HSDSCH-Initial-Capacity-AllocationItem
HSDSCH-Initial-Capacity-AllocationItem ::= SEQUENCE {
    schedulingPriorityIndicator
                                    SchedulingPriorityIndicator,
    maximum-MACdPDU-Size
                                    MACdPDU-Size,
   hSDSCH-InitialWindowSize
                                    HSDSCH-InitialWindowSize,
    iE-Extensions
                                    ProtocolExtensionContainer { {HSDSCH-Initial-Capacity-AllocationItem-ExtIEs } } OPTIONAL,
    . . .
HSDSCH-Initial-Capacity-AllocationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-MaximumMACdPDU-SizeExtended CRITICALITY ignore
                                                                EXTENSION MAC-PDU-SizeExtended PRESENCE optional },
    . . .
}
HSDSCH-InitialWindowSize
                                    ::= INTEGER (1..255)
-- Number of MAC-d PDUs.
```

```
HSDSCH-PreconfigurationInfo ::= SEQUENCE {
```

setsOfHS-SCCH-Codes SetsOfHS-SCCH-Codes, hARO-MemoryPartitioning HARO-MemoryPartitioning, eDCH-FDD-DL-ControlChannelInformation EDCH-FDD-DL-ControlChannelInformation OPTIONAL. hARO-Preamble-Mode-Activation-Indicator HARO-Preamble-Mode-Activation-Indicator OPTIONAL, MIMO-InformationResponse mIMO-N-M-Ratio OPTIONAL, continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response OPTIONAL, iE-Extensions ProtocolExtensionContainer { { HSDSCH-PreconfigurationInfo-ExtIEs } } OPTIONAL, . . . HSDSCH-PreconfigurationInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-power-offset-for-S-CPICH-for-MIMO CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMO PRESENCE optional } | { ID id-Additional-EDCH-Preconfiguration-Information CRITICALITY ignore EXTENSION Additional-EDCH-Preconfiguration-Information PRESENCE optional } | { ID id-Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order CRITICALITY ignore EXTENSION Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order PRESENCE optional } | { ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennas PRESENCE optional }, . . . Additional-EDCH-Preconfiguration-Information ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-Preconfiguration-Information-ItemIEs Additional-EDCH-Preconfiguration-Information-ItemIEs ::= SEQUENCE { eDCH-FDD-DL-ControlChannelInformation EDCH-FDD-DL-ControlChannelInformation, iE-Extensions ProtocolExtensionContainer { { Additional-EDCH-Preconfiguration-Information-ItemIEs-ExtIEs } } OPTIONAL, . . . J Additional-EDCH-Preconfiguration-Information-ItemIEs-ExtIEs RNSAP-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. hARO-Preamble-Mode HARO-Preamble-Mode OPTIONAL, mIMO-ActivationIndicator MIMO-ActivationIndicator OPTIONAL, hSDSCH-MACdPDUSizeFormat HSDSCH-MACdPDUSizeFormat OPTIONAL, sixtyfourQAM-UsageAllowedIndicator SixtyfourQAM-UsageAllowedIndicator OPTIONAL, uE-with-enhanced-HS-SCCH-support-indicator NULL OPTIONAL, continuous-Packet-Connectivity-HS-SCCH-Less-Information Continuous-Packet-Connectivity-HS-SCCH-Less-Information OPTIONAL, iE-Extensions ProtocolExtensionContainer { { HSDSCHPreconfigurationSetup-ExtIEs } } OPTIONAL, . . . HSDSCHPreconfigurationSetup-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-UE-SupportIndicatorExtension CRITICALITY ignore EXTENSION UE-SupportIndicatorExtension PRESENCE optional }

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{ ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator PRESENCE optional } | { ID id-MIMO-withfourtransmitantennas-ActivationIndicator CRITICALITY ignore EXTENSION MIMO-withfourtransmitantennas-ActivationIndicator PRESENCE optional } | { ID id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator CRITICALITY ignore EXTENSION DualStream-MIMO-withfourtransmitantennas-ActivationIndicator PRESENCE optional} { ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasRequestIndicator PRESENCE optional }, 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 RNSAP-PROTOCOL-EXTENSION ::= { . . . HS-SCCH-CodeNumber ::= INTEGER (0..127) HSDSCH-RNTI ::= INTEGER (0..65535) HS-DSCH-serving-cell-change-information ::= SEQUENCE { hS-PDSCH-RLID RL-ID, hSDSCH-FDD-Information HSDSCH-FDD-Information OPTIONAL, iE-Extensions ProtocolExtensionContainer { { HS-DSCH-serving-cell-change-information-ExtIEs } } OPTIONAL, . . . HS-DSCH-serving-cell-change-information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information CRITICALITY reject EXTENSION Continuous-Packet-Connectivity-HS-SCCH-Less-PRESENCE optional } | Information { ID id-Continuous-Packet-Connectivity-DTX-DRX-Information CRITICALITY reject EXTENSION Continuous-Packet-Connectivity-DTX-DRX-Information PRESENCE optional }, . . . HS-DSCH-serving-cell-change-informationResponse ::= SEQUENCE { hS-DSCH-serving-cell-choice HS-DSCH-serving-cell-change-choice, ProtocolExtensionContainer { { HS-DSCH-serving-cell-change-informationResponse-ExtIEs } } OPTIONAL, iE-Extensions . . . }

HS-DSCH-serving-cell-change-informationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

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. . .
3
HS-DSCH-serving-cell-change-choice ::= CHOICE {
    hS-serving-cell-change-successful
                                             HS-serving-cell-change-successful,
    hS-serving-cell-change-unsuccessful
                                             HS-serving-cell-change-unsuccessful,
    . . .
}
HSDSCH-TBSizeTableIndicator ::= ENUMERATED {
    octet-aligned
}
HS-serving-cell-change-successful ::= SEQUENCE {
    hSDSCH-FDD-Information-Response
                                         HSDSCH-FDD-Information-Response,
    hSDSCH-RNTI
                                         HSDSCH-RNTI,
                                         ProtocolExtensionContainer { { HS-serving-cell-change-successful-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
HS-serving-cell-change-successful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                              CRITICALITY ignore EXTENSION Continuous-Packet-Connectivity-HS-SCCH-
Less-Information-Response
                                PRESENCE optional },
    . . .
HS-serving-cell-change-unsuccessful ::= SEQUENCE {
    cause
                                     Cause,
                                     ProtocolExtensionContainer { { HS-serving-cell-change-unsuccessful-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
HS-serving-cell-change-unsuccessful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= ·
    . . .
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
HSDSCH-TDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlows-Information
                                                 HSDSCH-MACdFlows-Information,
    uE-Capabilities-Info
                                                 UE-Capabilities-Info,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                 MAChsReorderingBufferSize-for-RLC-UM,
    tDD-AckNack-Power-Offset
                                                 TDD-AckNack-Power-Offset,
    iE-Extensions
                                                 ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs } }
                                                                                                                                   OPTIONAL,
    . . .
```

HSDSCH-TDD-Information-Extles RNSAP-PROTOCOL-EXTENSION ::= { ID id-HSDSCH-MACdPDUSizeFormat CRITICALITY reject EXTENSION HSDSCH-MACdPDUSizeFormat PRESENCE optional } { ID id-HSSICH-SIRTarget CRITICALITY ignore EXTENSION UL-SIR PRESENCE optional } -- Applicable to 1.28Mcps TDD only { ID id-HSSICH-TPC-StepSize CRITICALITY ignore EXTENSION TDD-TPC-UplinkStepSize-LCR PRESENCE optional } | -- Mandatory for 1.28Mcps TDD only { 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 PRESENCE optional }, EXTENSION . . . HSDSCH-TDD-Information-Response ::= SEQUENCE { hSDSCH-MACdFlow-Specific-InfoList-Response HSDSCH-MACdFlow-Specific-InfoList-Response OPTIONAL, hSSCCH-TDD-Specific-InfoList-Response HSSCCH-TDD-Specific-InfoList-Response OPTIONAL, -- Not Applicable to 1.28Mcps TDD hSSCCH-TDD-Specific-InfoList-Response-LCR HSSCCH-TDD-Specific-InfoList-Response-LCR 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 MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR hSPDSCH-TDD-Specific-InfoList-Response HSPDSCH-TDD-Specific-InfoList-Response OPTIONAL, hSPDSCH-TDD-Specific-InfoList-Response-LCR HSPDSCH-TDD-Specific-InfoList-Response-LCR OPTIONAL, hARO-MemoryPartitioning HARO-MemoryPartitioning OPTIONAL, -- For 1.28Mcps TDD, this HARQ Memory Partitioning Information is for the first Frequency repetition, HARQ Memory Partitioning Information for Frequency repetitions 2 and on, should be defined in MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR iE-Extensions ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } } OPTIONAL, . . . J HSDSCH-TDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { { ID id-User-Plane-Congestion-Fields-Inclusion CRITICALITY ignore EXTENSION User-Plane-Congestion-Fields-Inclusion PRESENCE optional } | { ID id-hSSCCH-TDD-Specific-InfoList-Response768 CRITICALITY ignore EXTENSION HSSCCH-TDD-Specific-InfoList-Response768 PRESENCE optional } | { ID id-hSPDSCH-TDD-Specific-InfoList-Response768 CRITICALITY ignore EXTENSION HSPDSCH-TDD-Specific-InfoList-Response768 PRESENCE optional } | { 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-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 2<sup>nd</sup> 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 CRITICALITY reject {ID id-MIMO-SFMode-For-HSPDSCHDualStream EXTENSION MIMO-SFMode-For-HSPDSCHDualStream PRESENCE optional } | {ID id-MIMO-ReferenceSignal-InformationListLCR CRITICALITY reject EXTENSION MIMO-ReferenceSignal-InformationListLCR PRESENCE optional} { ID id-TS0-HS-PDSCH-Indication-LCR CRITICALITY ignore EXTENSION TS0-HS-PDSCH-Indication-LCR PRESENCE optional }|

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{ ID id-Out-of-Sychronization-Window
                                                         CRITICALITY reject
                                                                                  EXTENSION Out-of-Sychronization-Window
    PRESENCE optional },
    . . .
Multicarrier-Number ::= INTEGER (1..maxHSDPAFrequency)
HSPDSCH-TDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfDLTs)) OF HSPDSCH-TDD-Specific-InfoItem-Response
HSPDSCH-TDD-Specific-InfoItem-Response ::= SEQUENCE {
    timeslot
                                                     TimeSlot,
    midambleShiftAndBurstType
                                                     MidambleShiftAndBurstType,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-ExtIEs } }
    OPTIONAL.
    . . .
3
HSPDSCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
HSPDSCH-TDD-Specific-InfoList-Response-LCR ::= SEQUENCE (SIZE (1.. maxNrOfDLTsLCR)) OF HSPDSCH-TDD-Specific-InfoItem-Response-LCR
HSPDSCH-TDD-Specific-InfoItem-Response-LCR ::= SEQUENCE {
    timeslotLCR
                                                 TimeSlotLCR,
    midambleShiftLCR
                                                 MidambleShiftLCR,
    iE-Extensions
                                                 ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs } }
    OPTIONAL,
    . . .
J
HSPDSCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
HSPDSCH-TDD-Specific-InfoList-Response768 ::= SEQUENCE (SIZE (0..maxNrOfDLTs)) OF HSPDSCH-TDD-Specific-InfoItem-Response768
HSPDSCH-TDD-Specific-InfoItem-Response768 ::= SEQUENCE {
    timeslot
                                                     TimeSlot,
    midambleShiftAndBurstType768
                                                     MidambleShiftAndBurstType768,
                                                     ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-768-ExtIEs } }
    iE-Extensions
        OPTIONAL,
    . . .
}
HSPDSCH-TDD-Specific-InfoItem-Response-768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
HSSCCH-FDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-FDD-Specific-InfoItem-Response
HSSCCH-FDD-Specific-InfoItem-Response ::= SEQUENCE
    code-Number
                                                     INTEGER (0..127),
```

```
ProtocolExtensionContainer { { HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs } }
    iE-Extensions
    OPTIONAL.
    . . .
HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HSSCCH-PowerOffset ::= INTEGER (0..255)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
HSSCCH-TDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response
HSSCCH-TDD-Specific-InfoItem-Response ::= SEQUENCE {
    timeslot
                                                     TimeSlot,
                                                     MidambleShiftAndBurstType,
    midambleShiftAndBurstType
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
    hSSICH-Info
                                                     HSSICH-Info,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs } }
    OPTIONAL,
    . . .
HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HSSCCH-TDD-Specific-InfoList-Response-LCR ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response-LCR
HSSCCH-TDD-Specific-InfoItem-Response-LCR ::= SEQUENCE {
    timeslotLCR
                                                 TimeSlotLCR,
    midambleShiftLCR
                                                 MidambleShiftLCR,
    first-TDD-ChannelisationCode
                                                 TDD-ChannelisationCode,
    second-TDD-ChannelisationCode
                                            TDD-ChannelisationCode,
    hSSICH-InfoLCR
                                                HSSICH-InfoLCR,
    iE-Extensions
                                                 ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs } }
    OPTIONAL,
    . . .
}
HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HSSCCH-TDD-Specific-InfoList-Response768 ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response768
HSSCCH-TDD-Specific-InfoItem-Response768 ::= SEQUENCE {
    timeslot
                                                     TimeSlot,
    midambleShiftAndBurstType768
                                                     MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                     TDD-ChannelisationCode768,
    hSSICH-Info768
                                                     HSSICH-Info768,
```

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```
ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response768-ExtIEs } }
    iE-Extensions
    OPTIONAL.
    . . .
HSSCCH-TDD-Specific-InfoItem-Response768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HSSICH-Info ::= SEOUENCE {
    hsSICH-ID
                                                      HS-SICH-ID,
    timeslot
                                                      TimeSlot,
    midambleShiftAndBurstType
                                                      MidambleShiftAndBurstType,
    tDD-ChannelisationCode
                                                      TDD-ChannelisationCode,
    iE-Extensions
                                                      ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } }
                                                                                                                                    OPTIONAL,
    . . .
HSSICH-Info-ExtIEs RNSAP-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 RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HS-SICH-ID-Extension
                                             CRITICALITY iqnore
                                                                      EXTENSION HS-SICH-ID-Extension
                                                                                                            PRESENCE optional },
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
    . . .
HSSICH-Info768 ::= SEQUENCE {
    hsSICH-ID
                                                      HS-SICH-ID,
    timeslot
                                                      TimeSlot,
    midambleShiftAndBurstType768
                                                      MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                      TDD-ChannelisationCode768,
    iE-Extensions
                                                      ProtocolExtensionContainer { { HSSICH-Info-768-ExtIEs } }
                                                                                                                                    OPTIONAL,
    . . .
HSSICH-Info-768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
HS-SICH-Reception-Quality-Value ::= SEQUENCE {
    failed-HS-SICH
                                HS-SICH-failed,
    missed-HS-SICH
                                 HS-SICH-missed,
    total-HS-SICH
                                 HS-SICH-total,
```

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```
ProtocolExtensionContainer { { HS-SICH-Reception-Quality-Value-ExtIEs } } OPTIONAL,
    iE-Extensions
. . .
HS-SICH-Reception-Ouality-Value-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
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 TS 25.133 [23]
HS-SICH-ID ::= INTEGER (0..31)
HS-SICH-ID-Extension ::= INTEGER (32..255,...)
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-FDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator
                                                     HSSCCH-CodeChangeIndicator
                                                                                                  OPTIONAL,
    cqiFeedback-CycleK
                                                     COI-Feedback-Cycle
                                                                                                  OPTIONAL,
    cqiRepetitionFactor
                                                     CQI-RepetitionFactor
                                                                                                  OPTIONAL,
    ackNackRepetitionFactor
                                                     AckNack-RepetitionFactor
                                                                                                  OPTIONAL,
    cqiPowerOffset
                                                     COI-Power-Offset
                                                                                                  OPTIONAL,
    ackPowerOffset
                                                     Ack-Power-Offset
                                                                                                  OPTIONAL,
    nackPowerOffset
                                                     Nack-Power-Offset
                                                                                                  OPTIONAL,
                                                     ProtocolExtensionContainer { { HSDSCH-FDD-Update-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
}
HSDSCH-FDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ID id-HS-PDSCH-Code-Change-Indicator
                                                                                                                      PRESENCE optional },
                                             CRITICALITY ignore
                                                                     EXTENSION HS-PDSCH-Code-Change-Indicator
    . . .
```

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HSDSCH-TDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator
                                                     HSSCCH-CodeChangeIndicator
                                                                                                  OPTIONAL,
    tDDAckNackPowerOffset
                                                     TDD-AckNack-Power-Offset
                                                                                                  OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-TDD-Update-Information-ExtIEs } }
                                                                                                                                          OPTIONAL,
    . . .
٦
HSDSCH-TDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MIMO-ReferenceSignal-InformationListLCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSICH-ReferenceSignal-InformationLCR
HSSICH-ReferenceSignal-InformationLCR ::= SEQUENCE {
    midambleConfigurationLCR
                                    MidambleConfigurationLCR,
    midambleShift
                                    INTEGER (0..15),
    timeSlotLCR
                                    TimeSlotLCR,
                                    ProtocolExtensionContainer { { HSSICH-ReferenceSignal-InformationLCR-ExtIEs } }
    iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
HSSICH-ReferenceSignal-InformationLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HS-DSCH-Semi-PersistentScheduling-Information-LCR ::= SEQUENCE
                                             Transport-Block-Size-List-LCR,
    transport-Block-Size-List
                                             Repetition-Period-List-LCR,
    repetition-Period-List-LCR
    hS-DSCH-SPS-Reservation-Indicator
                                             SPS-Reservation-Indicator
                                                                                      OPTIONAL,
    hS-DSCH-SPS-Operation-Indicator
                                             HS-DSCH-SPS-Operation-Indicator,
    iE-Extensions
                                             ProtocolExtensionContainer { { HS-DSCH-Semi-PersistentScheduling-Information-LCR-ExtIEs } }
        OPTIONAL,
    . . .
HS-DSCH-Semi-PersistentScheduling-Information-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HSDSCH-Physical-Layer-Category ::= INTEGER (1..64)
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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
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Transport-Block-Size-maping-Index-LCR ::= INTEGER (0..maxNoOfTBSs-Mapping-HS-DSCH-SPS-1) Transport-Block-Size-Index-LCR ::= INTEGER (1..maxNoOfHS-DSCH-TBSsLCR) TS0-HS-PDSCH-Indication-LCR ::= NULL 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 RepetitionLength OPTIONAL, iE-Extensions ProtocolExtensionContainer { { Repetition-Period-Item-LCR-ExtIEs } } OPTIONAL, . . . Repetition-Period-Item-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { RepetitionPeriodIndex ::= INTEGER (0..maxNoOfRepetitionPeriod-SPS-LCR-1) SPS-Reservation-Indicator ::= ENUMERATED { reserve HS-DSCH-SPS-Operation-Indicator ::= CHOICE { logicalChannellevel LogicalChannellevel, priorityQueuelevel PriorityOueuelevel, . . . } LogicalChannellevel ::= BIT STRING (SIZE (16)) PriorityQueuelevel ::= BIT STRING (SIZE (8)) HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR ::= SEQUENCE { Transport-Block-Size-List-LCR transport-Block-Size-List OPTIONAL, repetition-Period-List-LCR Repetition-Period-List-LCR OPTIONAL, hS-DSCH-SPS-Reservation-Indicator SPS-Reservation-Indicator OPTIONAL, hS-DSCH-SPS-Operation-Indicator HS-DSCH-SPS-Operation-Indicator OPTIONAL, iE-Extensions ProtocolExtensionContainer { { HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs } } OPTIONAL, . . . HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . 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,

```
OPTIONAL,
    number-of-Processes-for-HS-DSCH-SPS
                                                 Number-of-Processes-for-HS-DSCH-SPS
    iE-Extensions
                                                 ProtocolExtensionContainer { { HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs } }
            OPTIONAL.
    . . .
}
HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs RNSAP-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,
    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 RNSAP-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,
    . . .
٦
HS-SCCH-Associated-HS-SICH ::= SEQUENCE
    hsSICH-ID
                                         HS-SICH-ID,
    extended-HS-SICH-ID
                                         HS-SICH-ID-Extension
                                                                          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.
    hS-PDSCH-Offset
                                                 TDD-PhysicalChannelOffset,
    hS-PDSCH-Midamble-Configuation
                                                 MidambleShiftLCR,
    timeslot-Resource-Related-Information
                                                 HS-DSCH-TimeslotResourceLCR,
    startCode
                                                 TDD-ChannelisationCode,
    endCode
                                                 TDD-ChannelisationCode,
```

```
Transport-Block-Size-Index-LCR,
    transport-Block-Size-Index
    modulationType
                                                 ModulationSPS-LCR,
    hS-SICH-Mapping-Index
                                                 HS-SICH-Mapping-Index,
                                                 ProtocolExtensionContainer { { Initial-HS-PDSCH-SPS-Resource-ExtIEs } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
. . .
3
Initial-HS-PDSCH-SPS-Resource-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
HS-DSCH-TimeslotResourceLCR := BIT STRING (SIZE (5))
ModulationSPS-LCR ::= ENUMERATED {
    qPSK,
    sixteenOAM,
    . . .
}
Number-of-Processes-for-HS-DSCH-SPS ::= INTEGER (1..16)
-- I
IMEI
            ::= OCTET STRING (SIZE(8))
IMEISV
            ::= OCTET STRING (SIZE(8))
IMSI
            ::= OCTET STRING (SIZE(3..8))
Inactivity-Threshold-for-UE-DTX-Cycle2 ::= ENUMERATED {v1, v4, v8, v16, v32, v64, v128, v256}
-- Unit E-DCH TTI
Inactivity-Threshold-for-UE-DRX-Cycle ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512}
-- Unit subframe
Inactivity-Threshold-for-UE-Grant-Monitoring ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256}
-- Unit E-DCH TTI
InformationAvailable::= SEQUENCE {
    requestedDataValue
                            RequestedDataValue,
    iE-Extensions
                            ProtocolExtensionContainer { { InformationAvailable-ExtIEs} }
                                                                                                  OPTIONAL,
    . . .
}
InformationAvailable-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
ļ
InformationExchangeID ::= INTEGER (0..1048575)
InformationNotAvailable ::= NULL
```

InformationReportCharacteristics ::= CHOICE { onDemand NULL, periodic PeriodicInformation. onModification OnModificationInformation, . . . } InformationReportPeriodicity ::= CHOICE { min INTEGER (1..60,...), -- Unit min, Step 1min hour INTEGER (1..24,...), -- Unit hour, Step 1hour . . . InformationThreshold ::= CHOICE { dGPSThreshold DGPSThreshold, . . . , dGANSSThreshold DGANSSThreshold } InformationType ::= SEQUENCE { informationTypeItem ENUMERATED { qA-AccessPointPositionwithAltitude, qA-AccessPointPosition, iPDLParameters, qPSInformation, dGPSCorrections, gPS-RX-POS, sFNSFN-GA-AccessPointPosition, . . . , cell-Capacity-Class, nACC-Related-Data, mBMSBearerServiceFullAddress, interFrequencyCellInformation, gANSSInformation, dGANSSCorrections, gANSS-RX-Pos, mBMS-Counting-Information, mBMS-Transmission-Mode, mBMS-Neighbouring-Cell-Information, mBMS-RLC-Sequence-Number, aNR-Cell-Information, cOmmonERGCH-Cell-Information }, gPSInformation GPSInformation OPTIONAL, ProtocolExtensionContainer { { InformationType-ExtIEs} } iE-Extensions OPTIONAL, . . .

<sup>}</sup> 

<sup>--</sup> The GPS Information IE shall be present if the Information Exchange Type IE indicates 'GPS Information'

<sup>--</sup> For information exchange on the Iur-g interface, only the Cell Capacity Class is used.

```
InformationType-ExtlEs RNSAP-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-Reg
                                        CRITICALITY ignore EXTENSION DGANSS-Corrections-Reg
                                                                                                PRESENCE conditional }|
-- The following IE shall be present if the Information Type Item IE indicates 'MBMS RLC Sequence Number'
    { ID id-MBMS-RLC-Sequence-Number-Information
                                                        CRITICALITY ignore EXTENSION MBMS-RLC-Sequence-Number-Information
                                                                                                                                 PRESENCE conditional
},
Initial-DL-DPCH-TiminqAdjustment-Allowed ::= ENUMERATED
    initial-DL-DPCH-TimingAdjustment-Allowed
InnerLoopDLPCStatus
                       ::= ENUMERATED {active, inactive}
IPDLParameters ::= CHOICE {
    iPDL-FDD-Parameters
                                IPDL-FDD-Parameters,
   iPDL-TDD-Parameters
                                IPDL-TDD-Parameters,
                                                        --3.84Mcps TDD and 7.68Mcps TDD only
    . . . .
    extension-IPDLParameters
                                Extension-IPDLParameters
Extension-IPDLParameters
                           := ProtocolIE-Single-Container {{ Extension-IPDLParametersIE }}
Extension-IPDLParametersIE RNSAP-PROTOCOL-IES ::= {
    { ID id-IPDL-TDD-ParametersLCR CRITICALITY reject TYPE IPDL-TDD-ParametersLCR PRESENCE mandatory },
    . . .
}
Inter-Frequency-Cell-List ::= SEQUENCE (SIZE (0..maxCellsMeas)) OF Inter-Frequency-Cell
Inter-Frequency-Cell ::= SEQUENCE {
   dL-UARFCN
                                UARFCN,
    uL-UARFCN
                                UARFCN
                                            OPTIONAL,
   primaryScramblingCode
                                PrimaryScramblingCode,
                                ProtocolExtensionContainer { {Inter-Frequency-Cell-ExtIEs} }
   iE-Extensions
                                                                                                  OPTIONAL,
    . . .
Inter-Frequency-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Inter-Frequency-Cell-Information ::= SEQUENCE {
    inter-Frequency-Cell-Information-SIB11
                                                Inter-Frequency-Cell-Information-SIB11,
    inter-Frequency-Cell-Information-SIB12
                                                Inter-Frequency-Cell-Information-SIB12,
    iE-Extensions
                                ProtocolExtensionContainer { {Inter-Frequency-Cell-Information-ExtIEs } }
                                                                                                                 OPTIONAL.
    . . .
}
Inter-Frequency-Cell-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
}
Inter-Frequency-Cell-Information-SIB11 ::= SEQUENCE (SIZE (0..2)) OF Inter-Frequency-Cells-Information-SIB11-Per-Indication
Inter-Frequency-Cell-Information-SIB12 ::= SEQUENCE (SIZE (0..2)) OF Inter-Frequency-Cells-Information-SIB12-Per-Indication
Inter-Frequency-Cells-Information-SIB11-Per-Indication ::= SEQUENCE {
    inter-Frequency-Cell-Indication-SIB11 Inter-Frequency-Cell-Indication,
    inter-Frequency-Cell-List-SIB11
                                       Inter-Frequency-Cell-SIB11-or-SIB12-List,
                                ProtocolExtensionContainer { { Inter-Frequency-Cells-Information-SIB11-Per-Indication-ExtIEs } }
   iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
Inter-Frequency-Cells-Information-SIB11-Per-Indication-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Inter-Frequency-Cells-Information-SIB12-Per-Indication ::= SEQUENCE
    inter-Frequency-Cell-Indication-SIB12 Inter-Frequency-Cell-Indication,
    inter-Frequency-Cell-List-SIB12
                                        Inter-Frequency-Cell-SIB11-or-SIB12-List,
                                ProtocolExtensionContainer { { Inter-Frequency-Cells-Information-SIB12-Per-Indication-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
Inter-Frequency-Cells-Information-SIB12-Per-Indication-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Inter-Frequency-Cell-Indication ::= INTEGER (0..1)
Inter-Frequency-Cell-SIB11-or-SIB12-List ::= SEQUENCE (SIZE (0..maxCellSIB11OrSIB12)) OF Inter-Frequency-Cell-SIB11-or-SIB12
Inter-Frequency-Cell-SIB11-or-SIB12 ::= SEQUENCE
    interFrequencyCellID
                                InterFrequencyCellID,
    dL-UARFCN
                                UARFCN,
    uL-UARFCN
                                UARFCN
                                            OPTIONAL,
    primaryScramblingCode
                                PrimaryScramblingCode,
                                ProtocolExtensionContainer { {Inter-Frequency-Cell-ExtIEs} }
   iE-Extensions
                                                                                                   OPTIONAL,
    . . .
InterFrequencyCellID ::= INTEGER (0..31)
InterStream-Interference-Compensation ::= INTEGER(0..15,...)
IPDL-FDD-Parameters ::= SEQUENCE {
    iPSpacingFDD
                                IPSpacingFDD,
    iPLength
                                IPLength,
    iPOffset
                                IPOffset,
                                Seed,
    seed
    burstModeParameters
                                BurstModeParameters
                                                        OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { { IPDL-FDD-Parameters-ExtIEs } }
                                                                                                   OPTIONAL,
    . . .
```

```
IPDL-FDD-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
IPDL-TDD-Parameters ::= SEQUENCE {
    iPSpacingTDD
                                IPSpacingTDD,
    iPStart
                                IPStart,
    iPSlot
                               IPSlot,
    iP-P-CCPCH
                                IP-P-CCPCH,
    burstModeParameters
                                BurstModeParameters
                                                        OPTIONAL,
                                ProtocolExtensionContainer { { IPDL-TDD-Parameters-ExtIEs } }
    iE-Extensions
                                                                                                    OPTIONAL,
    . . .
-- The BurstModeParameters IE shall be included if the Idle Periods are arranged in Burst Mode.
IPDL-TDD-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
IPDL-TDD-ParametersLCR ::= SEQUENCE {
                                IPSpacingTDD,
    iPSpacingTDD
    iPStart
                                IPStart,
   iPSub
                                IPSub,
    burstModeParameters
                                BurstModeParameters
                                                         OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { { IPDL-TDD-ParametersLCR-ExtIEs } } OPTIONAL,
    . . .
}
-- The BurstModeParameters IE shall be included if the Idle Periods are arranged in Burst Mode.
IPDL-TDD-ParametersLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
IPLength ::= ENUMERATED {
    ipl5,
    ipl10,
    . . .
}
IPMulticastAddress ::= OCTET STRING (SIZE (4..16))
IPOffset ::= INTEGER (0..9)
IP-P-CCPCH ::= ENUMERATED {
    switchOff-1-Frame,
    switchOff-2-Frames
}
IPSlot ::= INTEGER (0..14)
IPSpacingFDD ::= ENUMERATED {
```

```
ipsF5,
    ipsF7,
    ipsF10,
    ipsF15,
    ipsF20,
    ipsF30,
    ipsF40,
    ipsF50,
    . . .
}
IPSpacingTDD ::= ENUMERATED {
    ipsT30,
    ipsT40,
    ipsT50,
    ipsT70,
    ipsT100,
    . . .
}
IPStart ::= INTEGER (0..4095)
IPSub ::= ENUMERATED {
    first,
    second,
    both
}
IdleIntervalInformation ::= SEQUENCE {
    idleIntervalInfo-k
                                                  INTEGER(2..3),
    idleIntervalInfo-offset
                                                  INTEGER(0..7),
    . . .
}
-- J
-- K
-- L
LABased ::= SEQUENCE {
    laiList
                         LAI-List,
                        ProtocolExtensionContainer { {LABased-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
}
LABased-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
LAI-List
            ::= SEQUENCE (SIZE (1..maxNrOfLAIs)) OF
    LAI
LAC
                     ::= OCTET STRING (SIZE (2)) -- (EXCEPT (`0000'H|'FFFE'H))
                SEQUENCE {
LAI
        ::=
```

```
PLMN-Identity,
        pLMN-Identity
       1AC
                            LAC,
                            ProtocolExtensionContainer { {LAI-ExtIEs} } OPTIONAL,
        iE-Extensions
        . . .
LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}
List-Of-PLMNs ::= SEQUENCE (SIZE (1..maxNrOfBroadcastPLMNs)) OF PLMN-Identity
L3-Information
                            ::= BIT STRING
Load-Value-IncrDecrThres ::= INTEGER(0..100)
Load-Value ::= INTEGER(0..100)
LoadValue ::= SEQUENCE {
       uplinkLoadValue
                            INTEGER(0..100),
        downlinkLoadValue INTEGER(0..100)
}
LCRTDD-Uplink-Physical-Channel-Capability ::= SEQUENCE {
    maxTimeslotsPerSubFrame
                                        INTEGER(1..6),
                                        ENUMERATED{ts1, ts2, ts3, ts4,...},
    maxPhysChPerTimeslot
                                        ProtocolExtensionContainer { { LCRTDD-Uplink-Physical-Channel-Capability-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
LCRTDD-Uplink-Physical-Channel-Capability-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
-- M
M1Report ::= CHOICE {
    periodic
                       MDT-Report-Parameters,
    event1F
                        Event1F-Parameters,
    . . .
}
M2Report ::= CHOICE {
    periodic
                       MDT-Report-Parameters,
    event1I
                        Event1I-Parameters,
    . . .
}
MDT-Activation
                 ::= ENUMERATED { mdt-only,
                                     mdt-and-trace,
                                     ... }
```

```
::= CHOICE {
MDTAreaScope
    cellbased
                        CellBased,
    labased
                        LABased.
    rabased
                        RABased,
    plmn-area-based
                        NULL,
    . . .
MDT-Configuration ::= SEQUENCE {
        mdtActivation
                                        MDT-Activation,
        mdtAreaScope
                                        MDTAreaScope,
        mlreport
                                        M1Report
                                                         OPTIONAL,
        m2report
                                        M2Report
                                                         OPTIONAL,
        m3report
                                        NULL
                                                         OPTIONAL,
        iE-Extensions
                            ProtocolExtensionContainer { { MDT-Configuration-ExtIEs } } OPTIONAL,
        . . .
}
MDT-Configuration-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
. . .
}
MDT-Report-Parameters := SEQUENCE {
                            ReportInterval,
    reportInterval
    reportAmount
                            ReportAmount,
    . . .
3
MeasurementQuantity
                        ::= ENUMERATED {
        cpichEcNo,
        cpichRSCP,
        pathloss,
        . . .
}
MaxNrOfUL-DPCHs
                            ::= INTEGER (1..6)
MAC-c-sh-SDU-Length
                            ::= INTEGER (1..5000)
MAC-c-sh-SDU-LengthList ::= SEQUENCE(SIZE(1..maxNrOfMACcshSDU-Length)) OF MAC-c-sh-SDU-Length
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,...}
MAC-Inactivity-Threshold ::= ENUMERATED {v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity}
    -- Unit subframe
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
MACdPDU-Size-IndexList ::= SEQUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem
MACdPDU-Size-IndexItem ::= SEQUENCE {
    sID
                                        SID,
                                        MACdPDU-Size,
   mACdPDU-Size
                                        ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-ExtIEs } }
   iE-Extensions
                                                                                                                         OPTIONAL,
    . . .
MACdPDU-Size-IndexItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MACdPDU-Size-IndexList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify
MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
    sID
                                        SID,
    mACdPDU-Size
                                        MACdPDU-Size,
   iE-Extensions
                                        ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs } }
                                                                                                                                         OPTIONAL,
    . . .
MACdPDU-Size-IndexItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MACes-Guaranteed-Bitrate ::= INTEGER (0..16777215,...,16777216..256000000)
MACes-Maximum-Bitrate-LCR ::= INTEGER (0..25600000,...)
MACeReset-Indicator ::= ENUMERATED {mACeReset}
MAChsGuaranteedBitRate ::= INTEGER (0..16777215,...,16777216..100000000)
MAChsReorderingBufferSize-for-RLC-UM ::= INTEGER (0..300,...)
-- Unit kBytes
MAC-hsWindowSize
                       ::= ENUMERATED {v4, v6, v8, v12, v16, v24, v32,..., v64, v128, v256}
MAChsResetScheme ::= ENUMERATED {
    always,
    interNodeB-change
}
MaximumAllowedULTxPower
                          ::= INTEGER (-50..33)
Max-Bits-MACe-PDU-non-scheduled ::= INTEGER(1..maxNrOfBits-MACe-PDU-non-scheduled)
MaxNrDLPhysicalchannels
                          ::= INTEGER (1..224)
-- 1.28Mcps TDD 97 - 224 are unused
MaxNrDLPhysicalchannels768 ::= INTEGER (1..448)
```

```
MaxNrDLPhysicalchannelsTS := INTEGER (1..16)
MaxNrDLPhysicalchannelsTS768 := INTEGER (1..32)
MaxNr-Retransmissions-EDCH := INTEGER (0..15)
MaxNrTimeslots
                           ::= INTEGER (1..14)
-- 1.28Mcps values 7-14 are unused
MaxNrULPhysicalchannels
                         ::= INTEGER (1..2)
Max-Set-E-DPDCHs ::= ENUMERATED {
    vN256, vN128, vN64, vN32, vN16, vN8, vN4, v2xN4, v2xN2, v2xN2plus2xN4,
    . . . ,
    v2xM2plus2xM4
-- Values releated to TS 25.212 [9]
Max-UE-DTX-Cycle ::= ENUMERATED {
    v5, v10, v20, v40, v64, v80, v128, v160,
    . . .
MBMS-Bearer-Service-Full-Address ::= SEQUENCE {
    accessPointName
                                           AccessPointName,
    iPMulticastAddress
                                           IPMulticastAddress,
                                        ProtocolExtensionContainer { { MBMS-Bearer-Service-Full-Address-ExtIEs } }
    iE-Extensions
                                                                                                                                       OPTIONAL,
    . . .
}
MBMS-Bearer-Service-Full-Address-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MBMS-Bearer-Service-List := SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF TMGI
MBMS-Bearer-ServiceItemFDD ::=SEQUENCE{
    tmgi TMGI,
    transmissionMode
                       TransmissionMode,
    iE-Extensions
                                    ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemFDD-ExtIEs } } OPTIONAL,
    . . .
}
MBMS-Bearer-ServiceItemFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MBMS-Bearer-ServiceItemFDD-PFL ::=SEQUENCE{
    tmgi TMGI,
                           TransmissionMode
    transmissionMode
                                                OPTIONAL,
```

```
preferredFrequencyLayer
                                UARFCN
                                                OPTIONAL,
   iE-Extensions
                                    ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemFDD-PFL-ExtIEs } } OPTIONAL,
    . . .
MBMS-Bearer-ServiceItemFDD-PFL-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MBMS-Bearer-ServiceItemTDD ::=SEQUENCE{
    tmgi
          TMGI,
    transmissionMode
                      TransmissionMode,
   iE-Extensions
                                    ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemTDD-ExtIEs } } OPTIONAL,
    . . .
}
MBMS-Bearer-ServiceItemTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MBMS-Bearer-ServiceItemTDD-PFL ::=SEQUENCE{
   tmgi
          TMGI,
    transmissionMode TransmissionMode
                                            OPTIONAL,
    preferredFrequencyLayer UARFCN
                                                OPTIONAL,
                                    ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemTDD-PFL-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
MBMS-Bearer-ServiceItemTDD-PFL-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MBMSChannelTypeInfo ::= SEQUENCE {
    tMGI
                       TMGI,
                       PTMCellList
                                        OPTIONAL,
   pTM-Cell-List
   pTP-Cell-List
                    PTPCellList
                                        OPTIONAL,
   not-Provided-Cell-List NotProvidedCellList OPTIONAL,
   iE-Extensions
                       ProtocolExtensionContainer { { MBMSChannelTypeInfo-ExtIEs } } OPTIONAL,
MBMSChannelTypeInfo-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MBMSChannelTypeCellList ::= SEQUENCE {
    C-TD
                                            C-ID,
    affectedUEInformationForMBMS
                                        AffectedUEInformationForMBMS
                                                                         OPTIONAL,
                                        ProtocolExtensionContainer { { MBMSChannelTypeCellList-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
}
MBMSChannelTypeCellList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-ExtendedAffectedUEInformationForMBMS
                                                    CRITICALITY ignore EXTENSION ExtendedAffectedUEInformationForMBMS PRESENCE optional},
    . . .
```

```
}
MBMSPreferredFreqLaverInfo ::= SEQUENCE {
    tMGI
                                   TMGI,
    preferredFrequencyLayerInfo
                                   PreferredFrequencyLayerInfo,
                                   ProtocolExtensionContainer { { MBMSPreferredFreqLaverInfo-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
MBMSPreferredFreqLayerInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MBMS-Neighbouring-Cell-Information ::= SEQUENCE {
   mBMS-ConcatenatedServiceList MBMS-ConcatenatedServiceList,
   13-Information-1
                                       L3-Information OPTIONAL,
-- This IE contains MBMS COMMON P-T-M RB INFORMATION defined in TS 25.331 [16]
   13-Information-2 L3-Information OPTIONAL,
-- This IE contains MBMS CURRENT CELL P-T-M RB INFORMATION defined in TS 25.331 [16]
   iE-Extensions
                                  ProtocolExtensionContainer { { MBMS-Neighbouring-Cell-Information-ExtIEs } } OPTIONAL,
    . . .
MBMS-Neighbouring-Cell-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MBMS-ConcatenatedServiceList
                             ::= SEQUENCE (SIZE (1..maxlengthMBMSconcatservlists)) OF TMGI
MBMS-RLC-Sequence-Number-Information ::= SEOUENCE (SIZE (1..maxNrOfCells)) OF MBMS-RLC-Sequence-Number-Information-List
MBMS-RLC-Sequence-Number-Information-List := SEQUENCE {
    C-TD
                                   C-ID,
    mBMS-Bearer-Service-List-RLC
                                                           MBMS-Bearer-Service-List-RLC,
                                   ProtocolExtensionContainer { { MBMS-RLC-Sequence-Number-Information-List-ExtIEs } }
   iE-Extensions
                                                                                                                               OPTIONAL,
    . . .
MBMS-RLC-Sequence-Number-Information-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MBMS-Bearer-Service-List-RLC::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF MBMS-Bearer-Service-List-RLCinfo
                                  ::= SEQUENCE {
MBMS-Bearer-Service-List-RLCinfo
                                   TMGI,
    tmqi
    time-Stamp
                                   Time-Stamp,
   iE-Extensions
                                   ProtocolExtensionContainer { { MBMS-Bearer-Service-List-RLCinfo-ExtIEs } }
                                                                                                                       OPTIONAL,
    . . .
MBMS-Bearer-Service-List-RLCinfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
MBSFN-Cluster-Identity
                           ::= INTEGER (0..65535)
MCCH-Message-List := SEQUENCE (SIZE (1.. maxNrOfMCCHMessages)) OF L3-Information
MCCH-Configuration-Info ::= SEQUENCE {
    secondaryCCPCHSystemInformationMBMS
                                                Secondary-CCPCH-System-Information-MBMS,
    ie-Extensions
                                                ProtocolExtensionContainer { {MCCH-Configuration-Info-ExtIEs } }
                                                                                                                    OPTIONAL,
}
MCCH-Configuration-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Secondary-CCPCH-System-Information-MBMS
                                                   ::= BIT STRING
MBSFN-Scheduling-Transmission-Time-Interval-Info-List ::=
                                                                SEQUENCE (SIZE (1.. maxNrOfMBMSL3)) OF MBSFN-Scheduling-Transmission-Time-Interval-
Item
MBSFN-Scheduling-Transmission-Time-Interval-Item
                                                    ::= SEQUENCE {
    tMGI
                                    TMGI,
    mbsfnSchedulingTransmissionTimeInterval
                                                MbsfnSchedulingTransmissionTimeInterval,
    ie-Extensions
                                                ProtocolExtensionContainer { { MBSFN-Scheduling-Transmission-Time-Interval-Item-ExtIEs } }
    OPTIONAL,
    . . .
MBSFN-Scheduling-Transmission-Time-Interval-Item-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MbsfnSchedulingTransmissionTimeInterval ::= ENUMERATED {tti4, tti8, tti16, tti32, tti64, tti128, tti256}
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
MinimumSpreadingFactor
                           ::= INTEGER (1..16)
MinimumSpreadingFactor768
                                ::= INTEGER (1..32)
MultipleURAsIndicator ::= ENUMERATED {
    multiple-URAs-exist,
    single-URA-exists
}
```

```
MaxAdjustmentStep
                           ::= INTEGER(1..10)
-- Unit Slot
MeasurementChangeTime
                           ::= INTEGER (1..6000,...)
-- The MeasurementChangeTime gives the MeasurementChangeTime
-- in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10 ms
MeasurementHysteresisTime
                               ::= INTEGER (1..6000,...)
-- The MeasurementHysteresisTime gives the
-- MeasurementHysteresisTime in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10ms
MeasurementIncreaseDecreaseThreshold
                                           ::= CHOICE {
                                   SIR-Value-IncrDecrThres,
    sir
    sir-error
                                    SIR-Error-Value-IncrDecrThres,
    transmitted-code-power
                                    Transmitted-Code-Power-Value-IncrDecrThres,
                                    RSCP-Value-IncrDecrThres,
    rscp
                                    Round-Trip-Time-IncrDecrThres,
    round-trip-time
    . . . .
    extension-MeasurementIncreaseDecreaseThreshold
                                                        Extension-MeasurementIncreaseDecreaseThreshold
Extension-MeasurementIncreaseDecreaseThreshold ::= ProtocolIE-Single-Container {{ Extension-MeasurementIncreaseDecreaseThresholdIE }}
Extension-MeasurementIncreaseDecreaseThresholdIE RNSAP-PROTOCOL-IES ::= {
     ID id-Load-Value-IncrDecrThres
                                       CRITICALITY reject TYPE Load-Value-IncrDecrThres PRESENCE mandatory }
     ID id-Transmitted-Carrier-Power-Value-IncrDecrThres CRITICALITY reject TYPE Transmitted-Carrier-Power-Value-IncrDecrThres
    PRESENCE mandatory } |
    { ID id-Received-Total-Wideband-Power-Value-IncrDecrThres CRITICALITY reject TYPE Received-Total-Wideband-Power-Value-IncrDecrThres
    PRESENCE mandatory }|
     ID id-UL-Timeslot-ISCP-Value-IncrDecrThres CRITICALITY reject TYPE UL-Timeslot-ISCP-Value-IncrDecrThres
                                                                                                                        PRESENCE mandatory } |
     ID id-RT-Load-Value-IncrDecrThres CRITICALITY reject TYPE RT-Load-Value-IncrDecrThres
                                                                                               PRESENCE mandatory }|
     ID id-NRT-Load-Information-Value-IncrDecrThres CRITICALITY reject TYPE NRT-Load-Information-Value-IncrDecrThres
                                                                                                                               PRESENCE mandatory
}|
    { ID id-UpPTSInterferenceValue
                                       CRITICALITY reject TYPE
                                                                   UpPTSInterferenceValue
                                                                                                PRESENCE mandatory }
MeasurementRecoveryBehavior ::= NULL
MeasurementRecoveryReportingIndicator ::= NULL
MeasurementRecoverySupportIndicator ::= NULL
MeasurementThreshold
                               ::= CHOICE {
    sir
                                    SIR-Value.
                                    SIR-Error-Value,
    sir-error
    transmitted-code-power
                                    Transmitted-Code-Power-Value,
    rscp
                                    RSCP-Value,
    rx-timing-deviation
                                    Rx-Timing-Deviation-Value,
    round-trip-time
                                    Round-Trip-Time-Value,
```

••••

}

```
extension-MeasurementThreshold Extension-MeasurementThreshold
```

Extension-MeasurementThreshold ::= ProtocolIE-Single-Container {{ Extension-MeasurementThresholdIE }}

Extension-MeasurementThresholdIE RNSAP-PROTOCOL-IES ::= {				
	SUTEMENTIATESDOIDLE RNSAP-PROTOCOL-IES ::= "UTRANGPSMeasurementThresholdInformation	L C C C C C C C C C C C C C C C C C C C	TYPE TUTRANGPSMeasurementThresholdInformation	PRESENCE mandatory
	FNSFNMeasurementThresholdInformation	CRITICALITY reject	TYPE SFNSFNMeasurementThresholdInformation	PRESENCE mandatory
{ ID id-L	oad-Value	CRITICALITY reject	TYPE Load-Value	PRESENCE mandatory
}  { ID id-T }	ransmitted-Carrier-Power-Value	CRITICALITY reject	TYPE Transmitted-Carrier-Power-Value	PRESENCE mandatory
}  { ID id-R }	eceived-Total-Wideband-Power-Value	CRITICALITY reject	TYPE Received-Total-Wideband-Power-Value	PRESENCE mandatory
{ ID id-U	L-Timeslot-ISCP-Value	CRITICALITY reject	TYPE UL-Timeslot-ISCP-Value	PRESENCE mandatory
	T-Load-Value	CRITICALITY reject	TYPE RT-Load-Value	PRESENCE mandatory
	RT-Load-Information-Value	CRITICALITY reject	TYPE NRT-Load-Information-Value	PRESENCE mandatory
₹ ID id-H	x-Timing-Deviation-Value-LCR IS-SICH-Reception-Quality-Measurement-Value	-	TYPE Rx-Timing-Deviation-Value-LCR TYPE HS-SICH-Reception-Quality-Measurement-Value	PRESENCE mandatory}  PRESENCE mandatory
	IpPTSInterferenceValue	CRITICALITY reject	TYPE UpPTSInterferenceValue	PRESENCE mandatory
	x-Timing-Deviation-Value-768	CRITICALITY reject	TYPE Rx-Timing-Deviation-Value-768	PRESENCE mandatory
	x-Timing-Deviation-Value-ext	CRITICALITY reject	TYPE Rx-Timing-Deviation-Value-ext	PRESENCE mandatory
}  { ID id-E }	xtended-Round-Trip-Time-Value	CRITICALITY reject	TYPE Extended-Round-Trip-Time-Value	PRESENCE mandatory
/  { ID id-T }	UTRANGANSSMeasurementThresholdInformation	CRITICALITY reject	TYPE TUTRANGANSSMeasurementThresholdInformation	PRESENCE mandatory
	{ ID id-UE-transmission-power-headroom CRITICALITY reject TYPE UE-transmission-power-headroom-Value }			
MidambleConfigurationBurstTypelAnd3 ::= ENUMERATED {v4, v8, v16}				
MidambleConfigurationBurstType2 ::= ENUMERATED {v3, v6}				
MidambleConfigurationLCR := ENUMERATED { $v2$ , $v4$ , $v6$ , $v8$ , $v10$ , $v12$ , $v14$ , $v16$ ,}				
<pre>MidambleShiftAndBurstType ::= CHOICE {    type1 SEQUENCE {       midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,       midambleAllocationMode CHOICE {          defaultMidamble NULL,          commonMidamble NULL,          ueSpecificMidamble MidambleShiftLong,        }.</pre>				

},

```
. . .
    },
    type2
                                         SEQUENCE {
                                             MidambleConfigurationBurstType2,
        midambleConfigurationBurstType2
        midambleAllocationMode
                                             CHOICE
            defaultMidamble
                                                 NULL,
            commonMidamble
                                                 NULL,
                                                 MidambleShiftShort,
            ueSpecificMidamble
            . . .
        },
        . . .
    },
    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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MidambleShiftAndBurstType768 ::=
                                         CHOICE {
                                         SEOUENCE
    type1
        midambleConfigurationBurstType1And3
                                                 MidambleConfigurationBurstType1And3,
        midambleAllocationMode
                                             CHOICE {
            defaultMidamble
                                                 NULL,
            commonMidamble
                                                 NULL,
```

```
ueSpecificMidamble
                                                 MidambleShiftLong,
            . . .
        },
        . . .
    },
                                         SEQUENCE
    type2
        midambleConfigurationBurstType2-768
                                                 MidambleConfigurationBurstType2-768,
        midambleAllocationMode
                                             CHOICE {
            defaultMidamble
                                                 NULL,
            commonMidamble
                                                 NULL,
            ueSpecificMidamble
                                                 MidambleShiftShort768,
            . . .
        },
        . . .
    },
    type3
                                         SEQUENCE ·
        midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
        midambleAllocationMode
                                         CHOICE {
            defaultMidamble
                                                 NULL,
            ueSpecificMidamble
                                                 MidambleShiftLong,
            . . .
        },
        . . .
    },
    . . .
MidambleConfigurationBurstType2-768 ::=
                                             ENUMERATED \{v4, v8\}
MidambleShiftShort768 ::=
                                         INTEGER (0..7)
MIMO-ActivationIndicator
                            ::= NULL
MIMO-InformationResponse ::= SEQUENCE {
    mIMO-PilotConfiguration
                                                 MIMO-PilotConfiguration,
    mIMO-N-M-Ratio
                                                 MIMO-N-M-Ratio,
    iE-Extensions
                                                 ProtocolExtensionContainer { { MIMO-InformationResponse-ExtIEs } }
                                                                                                                                            OPTIONAL,
MIMO-InformationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Additional-Associated-Secondary-CPICH CRITICALITY reject EXTENSION Additional-Associated-Secondary-CPICH
                                                                                                                                    PRESENCE optional },
    . . .
}
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
                                             MIMO-S-CPICH-Channelisation-Code,
    normal-and-diversity-primary-CPICH
                                             NULL,
    . . .
MIMO-S-CPICH-Channelisation-Code ::= INTEGER (0..255)
MIMO-withfourtransmitantennas-ActivationIndicator := NULL
MIMO-withfourtransmitantennas-ModeIndicator ::= ENUMERATED {
    activate,
    deactivate
}
DualStream-MIMO-withfourtransmitantennas-ActivationIndicator
                                                                 ::= NULL
DualStream-MIMO-withfourtransmitantennas-ModeIndicator ::= ENUMERATED {
    activate,
    deactivate
}
Additional-Associated-Secondary-CPICH ::= SEQUENCE (SIZE (1.. maxSCPICHCell-1)) OF Additional-Secondary-CPICH
Additional-Secondary-CPICH ::= SEQUENCE{
    additional-secondary-CPICH
                                             MIMO-S-CPICH-Channelisation-Code,
    additional-D-CPICH
                                             MIMO-S-CPICH-Channelisation-Code OPTIONAL,
    iE-Extensions
                                             ProtocolExtensionContainer { { Additional-Secondary-CPICH-Item-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
}
Additional-Secondary-CPICH-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MinUL-ChannelisationCodeLength
                                     ::= ENUMERATED
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256
MinimumReducedE-DPDCH-GainFactor ::= ENUMERATED {m8-15, m11-15, m15-15, m21-15, m30-15, m42-15, m60-15, m84-15,...}
ModifyPriorityQueue ::= CHOICE {
    addPriorityQueue
                                 PriorityQueue-InfoItem-to-Add,
    modifyPriorityOueue
                                PriorityQueue-InfoItem-to-Modify,
    deletePriorityQueue
                                PriorityQueue-Id,
    . . .
```

```
Modulation ::= ENUMERATED {
    aPSK.
    eightPSK,
    . . .
                                ::= ProtocolIE-Single-Container { {MulticellEDCH-InformationItem} }
MulticellEDCH-Information
MulticellEDCH-InformationItem RNSAP-PROTOCOL-IES ::= {
    { ID id-MulticellEDCH-Information CRITICALITY ignore TYPE MulticellEDCH-InformationItemIEs
                                                                                                          PRESENCE mandatory
MulticellEDCH-InformationItemIEs::= SEQUENCE
    dL-PowerBalancing-Information
                                            DL-PowerBalancing-Information
                                                                                 OPTIONAL.
    minimumReducedE-DPDCH-GainFactor
                                            MinimumReducedE-DPDCH-GainFactor
                                                                                     OPTIONAL.
    secondary-UL-Frequency-Activation-State
                                                    Secondary-UL-Frequency-Activation-State
                                                                                                 OPTIONAL,
    f-DPCH-SlotFormat
                                                        OPTIONAL,
                                F-DPCH-SlotFormat
    common-DL-ReferencePowerInformation
                                                DL-Power
                                                                OPTIONAL,
                        ProtocolExtensionContainer { { MulticellEDCH-InformationItemIEs-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
MulticellEDCH-InformationItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
                                            ::= ProtocolIE-Single-Container { {MulticellEDCH-RL-SpecificInformationItem} }
MulticellEDCH-RL-SpecificInformation
MulticellEDCH-RL-SpecificInformationItem RNSAP-PROTOCOL-IES ::= {
    { ID id-MulticellEDCH-RL-SpecificInformation CRITICALITY ignore TYPE MulticellEDCH-RL-SpecificInformationItemIEs
                                                                                                                                         PRESENCE
mandatory }
}
MulticellEDCH-RL-SpecificInformationItemIEs::= SEQUENCE
    extendedPropagationDelay
                                    ExtendedPropagationDelay
                                                                         OPTIONAL,
    enhanced-PrimaryCPICH-EcNo
                                    Enhanced-PrimaryCPICH-EcNo
                                                                         OPTIONAL,
    dl-Reference-Power
                                DL-Power
                                                    OPTIONAL,
    phase-Reference-Update-Indicator
                                            Phase-Reference-Update-Indicator
                                                                                         OPTIONAL,
    additional-e-DCH-DL-Control-Channel-Grant
                                                    NULL
                                                                                         OPTIONAL,
                        ProtocolExtensionContainer { { MulticellEDCH-RL-SpecificInformationItemIEs-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
MulticellEDCH-RL-SpecificInformationItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Multicell-EDCH-Restriction ::= BOOLEAN
Multiple-PLMN-List ::= SEQUENCE {
    pLMN-Identity
                        PLMN-Identity,
   list-Of-PLMNs
                        List-Of-PLMNs
                                                                                     OPTIONAL,
```

```
ProtocolExtensionContainer { { Multiple-PLMN-List-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Multiple-PLMN-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
MultiplexingPosition ::= ENUMERATED {
    fixed.
    flexible
3
MAChs-ResetIndicator ::= ENUMERATED{
    mAChs-NotReset
MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR ::= SEQUENCE (SIZE (1.. maxHSDPAFrequency-1)) OF MultipleFreq-HSPDSCH-InformationItem-
ResponseTDDLCR
--Includes the 2<sup>nd</sup> through the max number of frequency repetitions
MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR ::= SEQUENCE{
    hSSCCH-TDD-Specific-InfoList-Response-LCR
                                                     HSSCCH-TDD-Specific-InfoList-Response-LCR
                                                                                                  OPTIONAL.
    hARQ-MemoryPartitioning
                                                     HARQ-MemoryPartitioning
                                                                                                   OPTIONAL,
    UARFCN
                                                     UARFCN,
    -- This is the UARFCN for the second and beyond Frequency repetition.
                                                     ProtocolExtensionContainer { { MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR-ExtIEs } }
    iE-Extensions
        OPTIONAL,
    . . .
}
MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
. . .
}
MIMO-SFMode-For-HSPDSCHDualStream ::= ENUMERATED
    sF1,
    sF1SF16
}
Multi-Carrier-EDCH-Info ::= SEQUENCE{
    multicarrier-EDCH-Transport-Bearer-Mode
                                                                      Multicarrier-EDCH-Transport-Bearer-Mode,
    multi-carrier-EDCH-Information
                                                                      Multi-Carrier-EDCH-Information,
    iE-Extensions
                                     ProtocolExtensionContainer { { Multi-Carrier-EDCH-Info-ExtIEs } } OPTIONAL,
    . . .
Multi-Carrier-EDCH-Info-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Multicarrier-EDCH-Transport-Bearer-Mode ::= ENUMERATED {
    separate-Iur-Transport-Bearer-Mode,
```

```
shared-Iur-Transport-Bearer-Mode
}
Multi-Carrier-EDCH-Information ::= SEQUENCE (SIZE (1..maxNrOfULCarriersLCR-1)) OF Multi-Carrier-EDCH-LCR-InformationItem
Multi-Carrier-EDCH-LCR-InformationItem ::=SEQUENCE{
    uARFCNforNt
                                                     UARFCN,
    sNPL-carrier-group-indicator
                                                     SNPL-Carrier-Group-Indicator
                                                                                         OPTIONAL,
    pRxdesBase
                                                     E-PUCH-PRXdesBase,
    multi-Carrier-EDCH-MACdFlows-Information-TDD
                                                    Multi-Carrier-EDCH-MACdFlows-Information-TDD
                                                                                                                          OPTIONAL,
                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-LCR-InformationItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
٦
Multi-Carrier-EDCH-LCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SNPL-Carrier-Group-Indicator ::= INTEGER (1..3)
-- for multi-carrier E-DCH operation 1.28Mcps TDD only
Multi-Carrier-EDCH-MACdFlows-Information-TDD ::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlows)) OF Multi-Carrier-EDCH-MACdFlows-Specific-Info
Multi-Carrier-EDCH-MACdFlows-Specific-Info ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     EDCH-MACdFlow-ID,
    bindingID
                                                     BindingID,
    transportLayerAddress
                                                     TransportLayerAddress,
    iE-Extensions
                                                     ProtocolExtensionContainer { { Multi-Carrier-EDCH-MACdFlows-Specific-Info-ExtIEs } }
           OPTIONAL,
    . . .
٦
Multi-Carrier-EDCH-MACdFlows-Specific-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Multi-Carrier-EDCH-Reconfigure ::=SEQUENCE{
    continue-setup-change-Of-Multi-Carrier-EDCH
                                                                         Continue-Setup-Change-Multi-Carrier-EDCH,
                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-Reconfigure-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
Multi-Carrier-EDCH-Reconfigure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Continue-Setup-Change-Multi-Carrier-EDCH ::= CHOICE {
    continue
                            NULL,
    setup
                            Multi-Carrier-EDCH-Info,
    change
                           Multi-Carrier-EDCH-Change-Info,
    . . .
}
```

```
Multi-Carrier-EDCH-Change-Info ::=SEQUENCE{
```

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```

```
multicarrier-EDCH-Transport-Bearer-Mode
                                                             Multicarrier-EDCH-Transport-Bearer-Mode
                                                                                                                   OPTIONAL,
    multi-carrier-EDCH-Information
                                                             Multi-Carrier-EDCH-Information
                                                                                                                   OPTIONAL.
    multi-Carrier-EDCH-Information-Removal-List
                                                             Multi-Carrier-EDCH-Information-Removal-List
                                                                                                                   OPTIONAL.
    iE-Extensions
                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-Change-Info-ExtIEs } } OPTIONAL,
    . . .
3
Multi-Carrier-EDCH-Change-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Multi-Carrier-EDCH-Information-Removal-List ::= SEQUENCE (SIZE (1..maxNrOfULCarriersLCR-1)) OF Multi-Carrier-EDCH-Information-Removal-Info-ItemIEs
Multi-Carrier-EDCH-Information-Removal-Info-ItemIEs ::=SEQUENCE{
    uARFCNforNt
                                    UARFCN.
    iE-Extensions
                                     ProtocolExtensionContainer { { Multi-Carrier-EDCH-Information-Removal-Info-ItemIEs-ExtIEs } } OPTIONAL,
    . . .
Multi-Carrier-EDCH-Information-Removal-Info-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Multi-Carrier-EDCH-Information-Response ::= SEQUENCE (SIZE (1..maxNrOfULCarriersLCR-1)) OF Multi-Carrier-EDCH-LCR-Information-ResponseItem
Multi-Carrier-EDCH-LCR-Information-ResponseItem ::=SEOUENCE{
    uARFCNforNt
                                                     UARFCN,
    e-DCH-TDD-MACdFlow-Specific-InformationResp
                                                     E-DCH-TDD-MACdFlow-Specific-InformationResp
                                                                                                           OPTIONAL,
    e-AGCH-Specific-Information-Response-LCR-TDD
                                                     E-AGCH-Specific-InformationRespList-LCR-TDD
                                                                                                           OPTIONAL,
    e-HICH-Scheduled-InformationResp-LCR
                                                     E-HICH-Scheduled-InformationRespList-LCR-TDD
                                                                                                           OPTIONAL,
                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-LCR-Information-ResponseItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Multi-Carrier-EDCH-LCR-Information-ResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Multiflow-Reconfiguration ::= CHOICE
    setup
                                Multiflow-Information,
    configurationChange
                                Multiflow-Information-To-Modify,
    stop
                                Multiflow-Stop,
    . . .
Multiflow-Information ::= SEQUENCE {
    total-Number-of-HS-DSCH-Cells
                                             INTEGER (2...32,...),
    mode
                                             Multiflow-Mode,
    mimo
                                             Multiflow-MIMO,
    timing
                                             Multiflow-Timing
                                                                                      OPTIONAL,
    max-Number-of-HS-SCCH-Sets-per-NodeB
                                             INTEGER (1..16,...)
                                                                                      OPTIONAL,
                                             ProtocolExtensionContainer { { Multiflow-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
```

```
Multiflow-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Multiflow-Information-To-Modify ::= SEQUENCE {
    total-Number-of-HS-DSCH-Cells
                                                                                       OPTIONAL,
                                              INTEGER (2...32,...)
    mode
                                              Multiflow-Mode
                                                                                       OPTIONAL,
    mimo
                                             Multiflow-MIMO
                                                                                       OPTIONAL,
                                             Multiflow-Timing
                                                                                       OPTIONAL,
    timing
    max-Number-of-HS-SCCH-Sets-per-NodeB
                                             INTEGER (1..16,...)
                                                                                       OPTIONAL,
                                              ProtocolExtensionContainer { { Multiflow-Information-To-Modify-ExtIEs } }
    iE-Extensions
                                                                                                                                             OPTIONAL,
    . . .
Multiflow-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Multiflow-Stop ::= ENUMERATED {
    stop,
    . . .
}
Multiflow-Mode ::= ENUMERATED {
    primary,
    assisting,
    . . .
}
Multiflow-MIMO ::= ENUMERATED {
    on,
    off.
    . . .
}
Multiflow-Timing ::= CHOICE {
    time-Reference
                                         NULL,
    non-Time-Reference
                                         INTEGER (0...3840,...),
    . . .
}
Multiflow-OrdinalNumberOfFrequency ::= INTEGER (1..32,...)
MU-MIMO-InformationLCR ::= SEQUENCE {
    mU-MIMO-Operation
                                                  MU-MIMO-Operation,
    standalone-Midamble-Channel-Information
                                                  Standalone-Midamble-Channel-Information OPTIONAL,
                                         ProtocolExtensionContainer { { MU-MIMO-InformationLCR-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
MU-MIMO-Operation ::= ENUMERATED {
    mU-MIMO-Used,
    mU-MIMO-Not-Used,
```

```
. . .
}
MU-MIMO-Usage-Indicator ::= ENUMERATED {
    ul-Only,
    dl-Only,
    ul-and-dl
}
Standalone-Midamble-Channel-Information ::= SEQUENCE {
    standalone-Midamble-Configuratnion Standalone-Midamble-Configuratnion,
    standalone-MidambleShift
                                         Standalone-MidambleShift,
    timeslotLCR
                                         TimeSlotLCR,
    repetitionPeriod
                                         Standalone-Midamble-RepetitionPeriod,
                                         Standalone-Midamble-Offset,
    offset
    referenceBeta
                                         ReferenceBeta
                                                                          OPTIONAL,
                                         ProtocolExtensionContainer { { Standalone-Midamble-Channel-Information-ExtIEs } OPTIONAL,
    iE-Extensions
    . . .
}
Standalone-Midamble-Configuration::= ENUMERATED {
    v2,
    v4,
    v6,
    v8,
    v10,
    v12,
    v14,
    v16,
    . . .
٦
Standalone-MidambleShift ::= INTEGER (0..15)
Standalone-Midamble-RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64,
    . . .
}
Standalone-Midamble-Offset ::= INTEGER (0..63)
ReferenceBeta ::= INTEGER (-15..16)
Standalone-Midamble-Channel-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
MU-MIMO-InformationLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

. . .

```
MU-MIMO-Indicator ::= SEQUENCE {
    mU-MIMO-Usage-Indicator
                                            MU-MIMO-Usage-Indicator,
    standalone-Midamble-Channel-Indicator
                                            Standalone-Midamble-Channel-Indicator,
                                            ProtocolExtensionContainer { { MU-MIMO-Indicator-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
MU-MIMO-Indicator-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
-- N
NACC-Related-Data ::= SEQUENCE
    qERAN-SI-Type
                                GERAN-SI-Type,
                                ProtocolExtensionContainer { {NACC-Related-Data-ExtIEs} }
    iE-Extensions
                                                                                                  OPTIONAL,
    . . .
NACC-Related-Data-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Nack-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in TS 25.213 [21] subclause 4.2.1
NCC ::= BIT STRING (SIZE (3))
Neighbouring-UMTS-CellInformation ::= SEQUENCE (SIZE (1..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Single-Container {{ Neighbouring-UMTS-
CellInformationItemIE } }
Neighbouring-UMTS-CellInformation-Ext ::= SEQUENCE (SIZE (1..maxNrOfExtendedNeighbouringRNCs)) OF ProtocolIE-Single-Container {{ Neighbouring-UMTS-
CellInformationExtensionItemIE }}
Neighbouring-UMTS-CellInformationExtensionItemIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Neighbouring-UMTS-CellInformationExtensionItem CRITICALITY ignore TYPE Neighbouring-UMTS-CellInformationExtensionItem
                                                                                                                                          PRESENCE
    mandatory }
Neighbouring-UMTS-CellInformationExtensionItem ::= SEQUENCE {
    rNC-TD
                                            RNC-ID,
    cN-PS-DomainIdentifier
                                            CN-PS-DomainIdentifier
                                                                                      OPTIONAL,
    cN-CS-DomainIdentifier
                                            CN-CS-DomainIdentifier
                                                                                     OPTIONAL,
    neighbouring-FDD-CellInformation
                                            Neighbouring-FDD-CellInformation
                                                                                      OPTIONAL,
    neighbouring-TDD-CellInformation
                                            Neighbouring-TDD-CellInformation
                                                                                     OPTIONAL,
    neighbouring-LCR-TDD-CellInformation
                                            Neighbouring-LCR-TDD-CellInformation
                                                                                     OPTIONAL,
    extended-RNC-ID
                                            Extended-RNC-ID
                                                                                      OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { {Neighbouring-UMTS-CellInformationExtensionItem-ExtIEs } } OPTIONAL,
    . . .
```

```
Neighbouring-UMTS-CellInformationExtensionItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
Neighbouring-UMTS-CellInformationItemIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Neighbouring-UMTS-CellInformationItem CRITICALITY ignore TYPE
                                                                                 Neighbouring-UMTS-CellInformationItem
                                                                                                                         PRESENCE
                                                                                                                                         mandatorv
Neighbouring-UMTS-CellInformationItem ::= SEQUENCE
    rNC-ID
                                            RNC-ID,
    cN-PS-DomainIdentifier
                                            CN-PS-DomainIdentifier
                                                                         OPTIONAL.
    cN-CS-DomainIdentifier
                                            CN-CS-DomainIdentifier
                                                                         OPTIONAL.
    neighbouring-FDD-CellInformation
                                            Neighbouring-FDD-CellInformation
                                                                                 OPTIONAL,
    neighbouring-TDD-CellInformation
                                            Neighbouring-TDD-CellInformation
                                                                                 OPTIONAL,
                                            ProtocolExtensionContainer { {Neighbouring-UMTS-CellInformationItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Neighbouring-UMTS-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-neighbouring-LCR-TDD-CellInformation
                                                                                                 Neighbouring-LCR-TDD-CellInformation
                                                            CRITICALITY ignore
                                                                                     EXTENSION
    PRESENCE optional }
    { ID id-Extended-RNC-ID
                                                CRITICALITY reject EXTENSION Extended-RNC-ID
                                            PRESENCE optional },
    . . .
٦
Neighbouring-FDD-CellInformation ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Neighbouring-FDD-CellInformationItem
Neighbouring-FDD-CellInformationItem ::= SEQUENCE {
    C-TD
                                        C-ID,
    uARFCNforNu
                                        UARFCN,
    UARECNforNd
                                        UARFCN,
    frameOffset
                                        FrameOffset
                                                             OPTIONAL,
    primaryScramblingCode
                                        PrimaryScramblingCode,
    primaryCPICH-Power
                                        PrimaryCPICH-Power
                                                                OPTIONAL.
    cellIndividualOffset
                                        CellIndividualOffset
                                                                OPTIONAL,
    txDiversityIndicator
                                        TxDiversityIndicator,
    sTTD-SupportIndicator
                                        STTD-SupportIndicator
                                                                OPTIONAL,
                                        ClosedLoopMode1-SupportIndicator
    closedLoopMode1-SupportIndicator
                                                                             OPTIONAL,
    not-used-closedLoopMode2-SupportIndicator NULL
                                                        OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { Neighbouring-FDD-CellInformationItem-ExtIEs } } OPTIONAL,
    . . .
Neighbouring-FDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
      ID id-RestrictionStateIndicator
                                                CRITICALITY ignore
                                                                         EXTENSION RestrictionStateIndicator
                                                                                                                          PRESENCE optional }|
      ID id-DPC-Mode-Change-SupportIndicator
                                                CRITICALITY ignore
                                                                         EXTENSION DPC-Mode-Change-SupportIndicator
                                                                                                                                 PRESENCE optional }
     ID id-CoverageIndicator
                                                CRITICALITY ignore
                                                                         EXTENSION CoverageIndicator
                                                                                                                                         PRESENCE
optional }|
     ID id-AntennaColocationIndicator
                                                CRITICALITY ignore
                                                                         EXTENSION AntennaColocationIndicator
                                                                                                                          PRESENCE optional }
     ID id-HCS-Prio
                                                CRITICALITY ignore
                                                                         EXTENSION HCS-Prio
                                                                                                                                         PRESENCE
optional }|
```

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ID id-CellCapabilityContainer-FDD CRITICALITY ignore EXTENSION CellCapabilityContainer-FDD PRESENCE optional }| ID id-SNA-Information CRITICALITY ignore EXTENSION SNA-Information PRESENCE optional }| ID id-FrequencyBandIndicator CRITICALITY ignore EXTENSION FrequencyBandIndicator PRESENCE optional }| ID id-Max-UE-DTX-Cycle CRITICALITY ignore EXTENSION Max-UE-DTX-Cycle PRESENCE conditional }| -- This IE shall be present if the the fifteenth bit Continuous Packet Connectivity DTX-DRX Support Indicator in the Cell Capability Container FDD IE is set to the value "1". { ID id-Multiple-PLMN-List CRITICALITY ignore EXTENSION Multiple-PLMN-List PRESENCE optional }| ID id-Secondary-Serving-Cell-List CRITICALITY iqnore EXTENSION Secondary-Serving-Cell-List PRESENCE optional } ID id-Dual-Band-Secondary-Serving-Cell-List CRITICALITY ignore EXTENSION Secondary-Serving-Cell-List PRESENCE optional } -- This IE shall be present if the twenty-eighth bit Dual Band Support Indicator in the Cell Capability Container FDD IE is set to the value "1". ID id-CellCapabilityContainerExtension-FDD CRITICALITY ignore EXTENSION CellCapabilityContainerExtension-FDD PRESENCE optional }| ID id-CellListValidityIndicator CRITICALITY ignore EXTENSION CellListValidityIndicator PRESENCE optional }, . . . } NeighbouringFDDCellMeasurementInformation ::= SEQUENCE { 11C-TD UC-ID, UARFCN UARFCN, primaryScramblingCode PrimaryScramblingCode, ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL, iE-Extensions . . . NeighbouringFDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { } Neighbouring-GSM-CellInformation ::= ProtocolIE-Single-Container {{ Neighbouring-GSM-CellInformationIE }} Neighbouring-GSM-CellInformationIE RNSAP-PROTOCOL-IES ::= { { ID id-Neighbouring-GSM-CellInformation CRITICALITY ignore TYPE Neighbouring-GSM-CellInformationIEs PRESENCE mandatorv Neighbouring-GSM-CellInformationIEs ::= SEQUENCE ( SIZE (1..maxNrOfGSMNeighboursPerRNC,...)) OF Neighbouring-GSM-CellInformationItem Neighbouring-GSM-CellInformationItem ::= SEQUENCE { CGT CGI, cellIndividualOffset CellIndividualOffset OPTIONAL bSIC BSIC, Band-Indicator, band-Indicator bCCH-ARFCN BCCH-ARFCN, ProtocolExtensionContainer { { Neighbouring-GSM-CellInformationItem-ExtIEs } } OPTIONAL, iE-Extensions . . . Neighbouring-GSM-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { ID id-CoverageIndicator CRITICALITY iqnore EXTENSION CoverageIndicator PRESENCE optional } | ID id-AntennaColocationIndicator CRITICALITY ignore EXTENSION AntennaColocationIndicator PRESENCE optional

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<pre>{ ID id-HCS-Prio     PRESENCE optional }       { ID id-SNA-Information     PRESENCE optional }       { ID id-GERAN-Cell-Capability     optional }       { ID id-GERAN-Classmark     PRESENCE optional }  </pre>	CRITICALITY ignore	EXTENSION HCS-Prio	
	CRITICALITY ignore	EXTENSION SNA-Information	
	CRITICALITY ignore	EXTENSION GERAN-Cell-Capability	PRESENCE
	CRITICALITY ignore	EXTENSION GERAN-Classmark	
{    ID id-ExtendedGSMCellIndividualOff	set CRITICALITY ignore	EXTENSION ExtendedGSMCellIndividualOffset	PRESENCE optional },
}			
Neighbouring-TDD-CellInformation ::= SEQUENCE ( SIZE (1maxNrOfTDDNeighboursPerRNC,)) OF Neighbouring-TDD-CellInformationItem			
Neighbouring-TDD-CellInformationItem ::=			
c-ID C-ID uARFCNforNt UARF			
	neOffset OPTIONAL,		
	ParameterID,		
	Case, Slot OPTIONAL		
This IE shall be present if Sync Case = Case1 , sCH-TimeSlot SCH-TimeSlot OPTIONAL			
This IE shall be present if Sync Case = Case2 ,			
sCTD-Indicator SCTD-Indicat			
	IndividualOffset OPTIONAL,		
	ConstantValue OPTIONAL, PCH-Power OPTIONAL,		
-		<pre>qhbouring-TDD-CellInformationItem-ExtIEs} } OPT</pre>	IONAL,
••••			
}			
Neighbouring-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {			
{ ID id-RestrictionStateIndicator	CRITICALITY ignore		PRESENCE optional
}  { ID id-CoverageIndicator	CRITICALITY ignore	EXTENSION CoverageIndicator	PRESENCE
optional }  { ID id-AntennaColocationIndicator	CRITICALITY ignore	EXTENSION AntennaColocationIndicator	PRESENCE optional }
{ ID id-HCS-Prio	CRITICALITY ignore	EXTENSION HCS-Prio	PRESENCE OPCIONAL J
optional }  { ID id-CellCapabilityContainer-TDD	CRITICALITY import	EXTENSION CellCapabilityContainer-TDD	PRESENCE optional }
{ ID id-SNA-Information		EXTENSION SNA-Information	PRESENCE OPTIONAL J
optional }  { ID id-CellCapabilityContainer-TDD7	CRITICALITY ig:	nore EXTENSION CellCapabilityContainer-TDD76	8 PRESENCE
optional }	OD THE CALLERY & SHORE SHE		<b>DECENCE</b>
<pre>{ ID id-Multiple-PLMN-List optional },</pre>	CRITICALITY ignore	EXTENSION Multiple-PLMN-List	PRESENCE
}			
NeighbouringTDDCellMeasurementInformatic uC-ID	n ::= SEQUENCE { UC-ID,		
	UARFCN,		
	CellParameterID,		

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```
timeSlot
                                         TimeSlot
                                                                      OPTIONAL,
    midambleShiftAndBurstType
                                         MidambleShiftAndBurstType
                                                                     OPTIONAL,
    iE-Extensions
                                         ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL,
    . . .
NeighbouringTDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
NeighbouringTDDCellMeasurementInformationLCR ::= SEQUENCE
    uC-ID
                                         UC-ID,
    uARFCN
                                         UARFCN,
    cellParameterID
                                         CellParameterID,
    timeSlotLCR
                                         TimeSlotLCR
                                                                      OPTIONAL,
    midambleShiftLCR
                                         MidambleShiftLCR
                                                                      OPTIONAL,
    iE-Extensions
                                         ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs } } OPTIONAL,
    . . .
NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
NeighbouringTDDCellMeasurementInformation768 ::= SEQUENCE
    uC-ID
                                         UC-ID,
    UARFCN
                                         UARFCN,
    cellParameterID
                                         CellParameterID,
    timeSlot
                                         TimeSlot
                                                                      OPTIONAL,
    midambleShiftAndBurstType768
                                         MidambleShiftAndBurstType768
                                                                          OPTIONAL,
                                         ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem768-ExtIEs } OPTIONAL,
    iE-Extensions
    . . .
NeighbouringTDDCellMeasurementInformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Neighbouring-LCR-TDD-CellInformation ::= SEQUENCE (SIZE (1.. maxNrOfLCRTDDNeighboursPerRNC,...)) OF Neighbouring-LCR-TDD-CellInformationItem
Neighbouring-LCR-TDD-CellInformationItem ::= SEQUENCE {
    c-ID
                                     C-ID,
    uARFCNforNt
                                     UARFCN,
    frameOffset.
                                     FrameOffset
                                                         OPTIONAL,
    cellParameterID
                                     CellParameterID,
    sCTD-Indicator
                            SCTD-Indicator,
    cellIndividualOffset
                                     CellIndividualOffset
                                                              OPTIONAL,
    dPCHConstantValue
                                    DPCHConstantValue
                                                         OPTIONAL,
    pCCPCH-Power
                                     PCCPCH-Power
                                                              OPTIONAL,
    restrictionStateIndicator
                                     RestrictionStateIndicator
                                                                     OPTIONAL,
    iE-Extensions
                                     ProtocolExtensionContainer { { Neighbouring-LCR-TDD-CellInformationItem-ExtIEs } } OPTIONAL,
    . . .
```

}

```
Neighbouring-LCR-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-CoverageIndicator
                                           CRITICALITY ignore EXTENSION CoverageIndicator
                                                                                                                              PRESENCE optional }
      ID id-AntennaColocationIndicator
                                           CRITICALITY ignore EXTENSION AntennaColocationIndicator
                                                                                                                              PRESENCE optional }
      ID id-HCS-Prio
                                                                                                                              PRESENCE optional
                                           CRITICALITY ignore EXTENSION HCS-Prio
      ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD-LCR
                                                                                                                              PRESENCE optional }
      ID id-SNA-Information
                                           CRITICALITY ignore EXTENSION SNA-Information
                                                                                                                              PRESENCE optional }
      ID id-Multiple-PLMN-List
                                           CRITICALITY ignore EXTENSION Multiple-PLMN-List
                                                                                                                              PRESENCE optional }
     ID id-CellCapabilityContainerExtension-TDD-LCR CRITICALITY ignore EXTENSION CellCapabilityContainerExtension-TDD-LCR PRESENCE optional},
    . . .
Neighbouring-E-UTRA-CellInformation ::= SEOUENCE ( SIZE (1..maxNrOfEUTRANeighboursPerRNC,...)) OF Neighbouring-E-UTRA-CellInformationItem
Neighbouring-E-UTRA-CellInformationItem ::= SEQUENCE {
    eCGI
                                       ECGI,
    eARFCN-Information
                                       EARFCN-Information,
    iE-Extensions
                                       ProtocolExtensionContainer { { Neighbouring-E-UTRA-CellInformationItem-ExtIEs } } OPTIONAL,
    . . .
Neighbouring-E-UTRA-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
NonCellSpecificTxDiversity ::= ENUMERATED {
    txDiversity,
    . . .
3
NotProvidedCellList ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMSChannelTypeCellList
NrOfDLchannelisationcodes := INTEGER (1..8)
NrOfTransportBlocks
                           ::= INTEGER (0..512)
NRT-Load-Information-Value-IncrDecrThres ::= INTEGER(0..3)
NRT-Load-Information-Value ::= INTEGER(0..3)
NRTLoadInformationValue ::= SEQUENCE {
        uplinkNRTLoadInformationValue
                                           INTEGER(0..3),
        downlinkNRTLoadInformationValue
                                           INTEGER(0..3)
N-E-UCCH ::= INTEGER (1..12)
N-E-UCCH-LCR ::= 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,
    . . . ,
    one-two-carrier-discontiguous,
    two-two-carrier-discontiquous,
    one-two-carrier-contiguous,
    two-two-carrier-contiguous
NumHS-SCCH-Codes ::= INTEGER (1..maxNrOfHSSCCHCodes)
NoOfTargetCellHS-SCCH-Order::= INTEGER (1..30)
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
    . . .
3
Non-Serving-RL-Preconfig-Setup-ExtIEs RNSAP-PROTOCOL-EXTENSION::= {
    {ID id-Additional-E-DCH-Non-Serving-RL-Preconfiguration-Setup CRITICALITY ignore EXTENSION Additional-E-DCH-Non-Serving-RL-Preconfiguration-
Setup PRESENCE optional },
. . .
}
Additional-E-DCH-Non-Serving-RL-Preconfiguration-Setup ::= NULL
New-non-serving-RL-setup-selection ::= CHOICE {
    new-Serving-RL-in-DRNS
                                            NULL,
    new-Serving-RL-Not-in-DRNS
                                            NULL,
    new-Serving-RL-in-or-Not-in-DRNS
                                            NULL,
    . . .
Non-Serving-RL-Preconfig-Info ::= SEQUENCE
    new-non-serving-RL-E-DCH-FDD-DL-ControlChannelInformation-A
                                                                    EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
    new-non-serving-RL-E-DCH-FDD-DL-ControlChannelInformation-B
                                                                    EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
    new-non-serving-RL-E-DCH-FDD-DL-ControlChannelInformation-C
                                                                    EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
                            ProtocolExtensionContainer { {Non-Serving-RL-Preconfig-Info-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Non-Serving-RL-Preconfig-Info-ExtIEs
                                     RNSAP-PROTOCOL-EXTENSION
                                                                    ::=
    {ID id-Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList
                                                                                       CRITICALITY ignore
                                                                                                                 EXTENSION Additional-E-DCH-New-non-
serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList PRESENCE optional},
. . .
}
Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList ::= SEQUENCE(SIZE(1.. maxNrOfEDCH-1)) OF SEQUENCE {
    new-non-serving-RL-E-DCH-FDD-DL-Control-Channel-Information-A EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
    new-non-serving-RL-E-DCH-FDD-DL-Control-Channel-Information-B EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
```

```
new-non-serving-RL-E-DCH-FDD-DL-Control-Channel-Information-C EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
   iE-Extensions
                            ProtocolExtensionContainer { { Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList-ExtIEs } }
OPTIONAL.
    . . .
3
Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList-ExtIEs
                                                                                   RNSAP-PROTOCOL-EXTENSION ::=
. . .
}
NeedforIdleInterval ::= ENUMERATED {
    true,
    false
}
-- 0
OnModification ::= SEQUENCE {
    measurementThreshold
                           MeasurementThreshold,
   iE-Extensions
                            ProtocolExtensionContainer { {OnModification-ExtIEs} } OPTIONAL,
    . . .
}
OnModification-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
OnModificationInformation ::= SEQUENCE {
    informationThreshold InformationThreshold
                                                    OPTIONAL,
    iE-Extensions
                            ProtocolExtensionContainer { {OnModificationInformation-ExtIEs} } OPTIONAL,
    . . .
}
OnModificationInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
OrdinalNumberOfFrequency ::= INTEGER (1..32,...)
Out-of-Sychronization-Window ::= ENUMERATED {
ms40,
ms80,
ms160,
ms320,
ms640,
. . .
}
-- P
PagingCause ::= ENUMERATED {
    terminating-conversational-call,
```

```
terminating-streaming-call,
    terminating-interactive-call,
    terminating-background-call,
    terminating-low-priority-signalling,
    . . . ,
    terminating-high-priority-signalling,
    terminating-cause-unknown
}
-- See in TS 25.331 [16]
PagingRecordType ::= ENUMERATED {
    imsi-qsm-map,
    tmsi-qsm-map,
    p-tmsi-gsm-map,
    imsi-ds-41,
    tmsi-ds-41,
    . . .
-- See in TS 25.331 [16]
PartialReportingIndicator ::= ENUMERATED {
    partial-reporting-allowed
}
Pattern-Sequence-Identifier ::= INTEGER (1.. maxNrOfDCHMeasurementOccasionPatternSequence)
PayloadCRC-PresenceIndicator ::= ENUMERATED {
    crc-included,
    crc-not-included
}
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 0.1dBm
PCH-InformationList ::= SEQUENCE (SIZE(0..1)) OF PCH-InformationItem
PCH-InformationItem ::= SEQUENCE {
    transportFormatSet
                                     TransportFormatSet,
                                     ProtocolExtensionContainer { { PCH-InformationItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
PCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
PC-Preamble ::= INTEGER(0..7,...)
Periodic ::= SEQUENCE {
    reportPeriodicity
                            ReportPeriodicity,
    iE-Extensions
                            ProtocolExtensionContainer { {Periodic-ExtIEs} } OPTIONAL,
```

```
. . .
}
Periodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
3
PeriodicInformation ::= SEQUENCE {
    informationReportPeriodicity
                                         InformationReportPeriodicity,
    iE-Extensions
                                         ProtocolExtensionContainer { { PeriodicInformation-ExtIEs } } OPTIONAL,
    . . .
}
PeriodicInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Permanent-NAS-UE-Identity ::= CHOICE {
    imsi
                IMSI,
    . . .
Phase-Reference-Update-Indicator ::= ENUMERATED {
    phase-reference-needs-to-be-changed
PLCCHsequenceNumber ::= INTEGER (0..14)
PLMN-Identity ::= OCTET STRING (SIZE(3))
PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
PowerOffset
                        ::= INTEGER (0..24)
PowerOffsetForSecondaryCPICHforMIMO ::= INTEGER (-6..0)
-- Unit dB, Range -10dB .. 5dB, Step +1dB
PowerOffsetForSecondaryCPICHforMIMORequestIndicator ::= NULL
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennas ::= SEQUENCE (SIZE (1.. maxSCPICHCell)) OF Associated-Secondary-CPICH
Associated-Secondary-CPICH ::= SEQUENCE{
    associated-secondary-CPICH-channelId
                                             CommonPhysicalChannelID,
    associated-secondary-CPICH
                                             PowerOffsetForSCPICH-DCPICHforMIMOwithfourtransmitantennas
                                                                                                                            OPTIONAL,
    associated-D-CPICH-channelId
                                             CommonPhysicalChannelID
                                                                                                                            OPTIONAL,
    associated-D-CPICH
                                             {\tt PowerOffsetForSCPICH-DCPICHforMIMOwithfourtransmitantennas}
                                                                                                                            OPTIONAL,
                                             ProtocolExtensionContainer { { Associated-Secondary-CPICH-Item-ExtIEs } }
    iE-Extensions
                                                                                                                            OPTIONAL,
    . . .
```

```
.
```

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```
Associated-Secondary-CPICH-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
CommonPhysicalChannelID ::= INTEGER (0..255)
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasRequestIndicator ::= NULL
PowerOffsetForSCPICH-DCPICHforMIMOwithfourtransmitantennas ::= INTEGER (-12..0)
-- Unit dB, Range -10dB .. 5dB, Step +1dB
PRC ::= INTEGER (-2047..2047)
--pseudo range correction; scaling factor 0.32 meters
PRCDeviation ::= ENUMERATED {
   prcd1,
    prcd2,
   prcd5,
   prcd10,
    . . .
Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
}
Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
   pre-emptable
}
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
PreferredFrequencyLayerInfo ::= SEQUENCE {
    defaultPreferredFrequency
                                    UARFCN,
    additionalPreferredFrequency
                                    AdditionalPreferredFrequency
                                                                     OPTIONAL,
                                    ProtocolExtensionContainer { { PreferredFrequencyLayerInfo-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
PreferredFrequencyLayerInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
PrimaryCPICH-Power
                          ::= INTEGER (-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm
PrimaryCPICH-EcNo
                           ::= INTEGER (-30..30)
```

```
Primary-CPICH-Usage-For-Channel-Estimation ::= ENUMERATED {
  primary-CPICH-may-be-used,
  primary-CPICH-shall-not-be-used
PrimaryCCPCH-RSCP
                           ::= INTEGER (0..91)
-- Mapping of Non Negative values according to maping in TS 25.123 [24]
PrimaryCCPCH-RSCP-Delta
                           ::= INTEGER (-5..-1,...)
-- Mapping of Negative values according to maping in TS 25.123 [24]
PrimaryScramblingCode
                                ::= INTEGER (0..511)
PriorityLevel
                            ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority
PriorityQueue-Id ::= INTEGER (0..maxNrOfPrioQueues-1)
PriorityQueue-InfoList ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem
PriorityQueue-InfoItem ::= SEQUENCE {
    priorityQueue-Id
                                        PriorityQueue-Id,
    associatedHSDSCH-MACdFlow
                                        HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                        SchedulingPrioritvIndicator,
    t 1
                                        Τ1,
    discardTimer
                                        DiscardTimer
                                                                    OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                    OPTIONAL,
    mACdPDU-Size-Index
                                        MACdPDU-Size-IndexList,
    rLC-Mode
                                        RLC-Mode,
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-ExtIEs } }
    iE-Extensions
                                                                                                                         OPTIONAL,
    . . .
PriorityQueue-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-MaximumMACdPDU-SizeExtended
                                        CRITICALITY reject
                                                                EXTENSION MAC-PDU-SizeExtended
                                                                                                                    PRESENCE optional } |
 ID id-DL-RLC-PDU-Size-Format
                                            CRITICALITY iqnore
                                                                    EXTENSION DL-RLC-PDU-Size-Format PRESENCE optional }
 ID id-UE-AggregateMaximumBitRate-Enforcement-Indicator CRITICALITY ignore
                                                                                    EXTENSION UE-AggregateMaximumBitRate-Enforcement-Indicator
           PRESENCE optional },
    . . .
}
PriorityQueue-InfoList-EnhancedFACH-PCH ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem-EnhancedFACH-PCH
PriorityOueue-InfoItem-EnhancedFACH-PCH ::= SEOUENCE {
    priorityQueue-Id
                                        PriorityQueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    t 1
                                        Τ1,
    mAC-ehs-Reset-Timer
                                        MAC-ehs-Reset-Timer,
    discardTimer
                                        DiscardTimer
                                                                                OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize,
    maximum-MACdPDU-Size
                                        MAC-PDU-SizeExtended,
    iE-Extensions
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-EnhancedFACH-PCH-ExtIEs } }
    OPTIONAL,
```

```
. . .
}
PriorityQueue-InfoItem-EnhancedFACH-PCH-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
3
PriorityQueue-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF ModifyPriorityQueue
PriorityQueue-InfoItem-to-Add ::= SEQUENCE {
    priorityQueue-Id
                                        PriorityQueue-Id,
    associatedHSDSCH-MACdFlow
                                        HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    t1
                                        Τ1.
    discardTimer
                                        DiscardTimer
                                                                                 OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize,
                                        MAChsGuaranteedBitRate
    mAChsGuaranteedBitRate
                                                                                 OPTIONAL,
    mACdPDU-Size-Index
                                        MACdPDU-Size-IndexList,
    rLC-Mode
                                        RLC-Mode,
                                        ProtocolExtensionContainer { { PriorityOueue-InfoItem-to-Add-ExtIEs } }
    iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
PriorityQueue-InfoItem-to-Add-ExtIEs RNSAP-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 {
    priorityOueue-Id
                                        PriorityQueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                                 OPTIONAL,
    t1
                                        T1
                                                                                 OPTIONAL,
    discardTimer
                                        DiscardTimer
                                                                                 OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize
                                                                                 OPTIONAL,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                                 OPTIONAL,
    mACdPDU-Size-Index-to-Modify
                                        MACdPDU-Size-IndexList-to-Modify
                                                                                             OPTIONAL,
                                        ProtocolExtensionContainer { { PriorityOueue-InfoItem-to-Modify-ExtIEs } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
PriorityQueue-InfoItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-MaximumMACdPDU-SizeExtended
                                        CRITICALITY reject
                                                                            MAC-PDU-SizeExtended
                                                                                                                      PRESENCE optional }
                                                                 EXTENSION
                                        CRITICALITY ignore
{ ID id-DL-RLC-PDU-Size-Format
                                                                 EXTENSION
                                                                            DL-RLC-PDU-Size-Format
                                                                                                           PRESENCE optional },
    . . .
PriorityQueue-InfoList-to-Modify-Unsynchronised ::= SEQUENCE (SIZE (0..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem-to-Modify-Unsynchronised
PriorityQueue-InfoItem-to-Modify-Unsynchronised ::= SEQUENCE {
                                        PriorityQueue-Id,
    priorityQueueId
    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 RNSAP-PROTOCOL-EXTENSION ::= {
PropagationDelay
                          ::= INTEGER (0..255)
ProvidedInformation ::= SEQUENCE {
    mBMSChannelTypeInfo
                           MBMSChannelTypeInfo
                                                       OPTIONAL.
    mBMSPreferredFreqLayerInfo MBMSPreferredFreqLayerInfo
                                                               OPTIONAL.
   iE-Extensions
                                   ProtocolExtensionContainer { { ProvideInformation-ExtIEs } } OPTIONAL,
    . . .
ProvideInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UpPCH-InformationList-LCRTDD
                                           CRITICALITY ignore EXTENSION UpPCH-InformationList-LCRTDD
                                                                                                         PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
   { ID id-ANRReportIndication
                                           CRITICALITY ignore EXTENSION ANRReportIndication
                                                                                                         PRESENCE optional },
    . . .
}
UpPCH-InformationList-LCRTDD ::= SEQUENCE (SIZE (0.. maxFrequencyinCell)) OF ProtocollE-Single-Container {{ UpPCH-InformationItemIE-LCRTDD }}
UpPCH-InformationItemIE-LCRTDD RNSAP-PROTOCOL-IES ::= {
   { ID
           id-UpPCH-InformationItem-LCRTDD CRITICALITY ignore TYPE UpPCH-InformationItem-LCRTDD
                                                                                                                    PRESENCE mandatory },
    . . .
}
UpPCH-InformationItem-LCRTDD ::= SEQUENCE {
                 UARFCN
    uARFCNforNt
                                                    OPTIONAL,
    uPPCHPositionLCR
                           UPPCHPositionLCR
                                                    OPTIONAL,
                         ProtocolExtensionContainer { { UpPCH-InformationItem-LCRTDD-ExtIEs } }
   iE-Extensions
                                                                                                                        OPTIONAL,
    . . .
}
UpPCH-InformationItem-LCRTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
                           ::= INTEGER (0..15)
PunctureLimit
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100
-- 0 is not applicable for E-DPCH
PTMCellList ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMSChannelTypeCellList
PTPCellList ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMSChannelTypeCellList
```

-- Q

```
QE-Selector ::= ENUMERATED {
    selected.
    non-selected
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,...}
-- R
RABased ::= SEQUENCE {
    raiList
                        RAI-List,
                        ProtocolExtensionContainer { {RABased-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
}
RABased-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
RAI-List
            ::= SEQUENCE (SIZE (1..maxNrOfRAIs)) OF
    RAI
                        ::= ENUMERATED {
ReportInterval
                            ms250,
                            ms500,
                            ms1000,
                            ms2000,
                            ms3000,
                            ms4000,
                            ms6000,
                            ms12000,
                            ms16000,
                            ms20000,
                            ms24000,
                            ms32000,
                            ms64000,
                            ...}
                        ::= ENUMERATED { n1, n2, n4, n8, n16, n32, n64, infinity, ... }
ReportAmount
```

ETSI

```
RAC
                    ::= OCTET STRING (SIZE(1))
RAI ::= SEQUENCE {
    pLMN-Identity
                        PLMN-Identity,
    1AC
                        LAC,
    rAC
                        RAC
l
RANAP-EnhancedRelocationInformationRequest
                                             ::= BIT STRING
RANAP-EnhancedRelocationInformationResponse
                                             ::= BIT STRING
RANAP-RelocationInformation
                               ::= BIT STRING
Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s
RateMatchingAttribute
                               ::= INTEGER (1..maxRateMatching)
RB-Identity
                               ::= INTEGER (0..31)
RB-Info ::= SEQUENCE (SIZE(1..maxNoOfRB)) OF RB-Identity
Received-Total-Wideband-Power-Value ::= Received-total-wide-band-power
Received-Total-Wideband-Power-Value-IncrDecrThres ::= INTEGER(0..620)
-- Unit dB Step 0.1dB
-- e.g. value 100 means 10dB
Reference-E-TFCI-Information ::= SEQUENCE (SIZE (1..maxNrOfRefETFCIs)) OF Reference-E-TFCI-Information-Item
Reference-E-TFCI-Information-Item ::= SEQUENCE {
    reference-E-TFCI
                                    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 } }
                                                                                                                        OPTIONAL,
Reference-E-TFCI-Information-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    -- The following IE shall be present if the ref E-TFCI power offset to be signalled exceeds maxNrOfRefETFCI-PO-QUANTSTEPs
    { 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)
RefTFCNumber ::= INTEGER (0..15)
Released-CN-Domain ::= CHOICE {
    pSDomain
                            NULL,
    cSDomain
                            NULL,
    pS-CSDomain
                            NULL,
```

. . .

```
}
RepetitionLength
                            ::= INTEGER (1..63)
RepetitionPeriod ::= ENUMERATED {
   v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64
RepetitionNumber0 ::= INTEGER (0..255)
RepetitionNumber1 ::= INTEGER (1..256)
ReportCharacteristics ::= CHOICE {
    onDemand
                       NULL,
   periodic
                        Periodic,
    eventA
                        EventA,
    eventB
                        EventB,
    eventC
                        EventC,
                        EventD,
    eventD
    eventE
                        EventE,
    eventF
                        EventF,
    · · · ,
    extension-ReportCharacteristics
                                        Extension-ReportCharacteristics
Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}
Extension-ReportCharacteristicsIE RNSAP-PROTOCOL-IES ::= {
                                                                         PRESENCE mandatory } |
     ID id-OnModification CRITICALITY reject TYPE OnModification
     ID id-EventH
                        CRITICALITY reject TYPE EventH
                                                                         PRESENCE mandatory }
}
ReportPeriodicity ::= CHOICE {
    ten-msec
                            INTEGER (1..6000,...),
-- The Report Periodicity gives the reporting periodicity in number of 10 ms periods.
-- E.g. value 6000 means 60000ms (i.e. 1min)
-- Unit ms, Step 10ms
                    INTEGER (1..60,...),
   min
-- Unit min, Step 1min
    . . .
}
RequestedDataValue ::= SEQUENCE {
    gA-AccessPointPositionwithAltitude
                                                GA-AccessPointPositionwithOptionalAltitude OPTIONAL,
    iPDLParameters
                                                IPDLParameters
                                                                                             OPTIONAL,
    dGPSCorrections
                                                DGPSCorrections
                                                                                             OPTIONAL,
```

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```
qPS-NavigationModel-and-TimeRecovery
                                                GPS-NavigationModel-and-TimeRecovery
                                                                                             OPTIONAL,
    qPS-Ionospheric-Model
                                                GPS-Ionospheric-Model
                                                                                             OPTIONAL.
    aPS-UTC-Model
                                                GPS-UTC-Model
                                                                                             OPTIONAL.
    qPS-Almanac
                                                GPS-Almanac
                                                                                             OPTIONAL.
    qPS-RealTime-Integrity
                                                GPS-RealTime-Integrity
                                                                                             OPTIONAL.
    qPS-RX-POS
                                                GPS-RX-POS
                                                                                             OPTIONAL,
    sFNSFN-GA-AccessPointPosition
                                                GA-AccessPointPositionwithOptionalAltitude OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { RequestedDataValue-ExtIEs } }
                                                                                                                         OPTIONAL,
RequestedDataValue-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Cell-Capacity-Class-Value
                                                    CRITICALITY ignore EXTENSION Cell-Capacity-Class-Value
                                                                                                                                 PRESENCE optional }
      ID id-NACC-Related-Data
                                                    CRITICALITY ignore EXTENSION NACC-Related-Data
                                                                                                                                 PRESENCE optional
      ID id-MBMS-Bearer-Service-Full-Address
                                                    CRITICALITY ignore EXTENSION MBMS-Bearer-Service-Full-Address
                                                                                                                                 PRESENCE optional
                                                    CRITICALITY ignore EXTENSION Inter-Frequency-Cell-Information
      ID id-Inter-Frequency-Cell-Information
                                                                                                                                 PRESENCE optional
      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
      ID id-Counting-Information
                                                                        EXTENSION Counting-Information
                                                                                                                                 PRESENCE optional
                                                    CRITICALITY ignore
      ID id-Transmission-Mode-Information
                                                                        EXTENSION Transmission-Mode-Information
                                                                                                                                 PRESENCE optional
                                                    CRITICALITY ignore
      ID id-MBMS-Neighbouring-Cell-Information
                                                    CRITICALITY ignore EXTENSION MBMS-Neighbouring-Cell-Information
                                                                                                                                 PRESENCE optional
      ID id-RLC-Sequence-Number
                                                    CRITICALITY ignore EXTENSION RLC-Sequence-Number
                                                                                                                                 PRESENCE optional
      ID id-ANR-Cell-Information
                                                    CRITICALITY ignore EXTENSION ANR-Cell-Information
                                                                                                                                 PRESENCE optional }|
      ID id-Common-E-RGCH-Cell-Information
                                                    CRITICALITY ignore
                                                                        EXTENSION Common-E-RGCH-Cell-Information
                                                                                                                                 PRESENCE optional },
    . . .
RequestedDataValueInformation ::= CHOICE {
    informationAvailable
                                InformationAvailable,
    informationNotAvailable
                                InformationNotAvailable
}
RestrictionStateIndicator := ENUMERATED {
    cellNotResevedForOperatorUse,
    cellResevedForOperatorUse,
    . . .
RL-ID
                        ::= INTEGER (0..31)
RL-Set-ID
                        ::= INTEGER (0..31)
RL-Specific-DCH-Info ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF RL-Specific-DCH-Info-Item
RL-Specific-DCH-Info-Item ::= SEOUENCE {
                            DCH-ID,
    dCH-id
    bindingID
                            BindingID OPTIONAL,
    -- Shall be ignored if bearer establishment with ALCAP.
    transportLayerAddress
                           TransportLayerAddress
                                                        OPTIONAL,
    -- Shall be ignored if bearer establishment with ALCAP.
                            ProtocolExtensionContainer { { RL-Specific-DCH-Info-Item-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
```

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```
RL-Specific-DCH-Info-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-TransportBearerNotReguestedIndicator
                                                   CRITICALITY ignore EXTENSION TransportBearerNotReguestedIndicator
                                                                                                                                  PRESENCE optional
    }, -- FDD only
    . . .
3
RL-Specific-EDCH-Information ::= SEQUENCE {
    rL-Specific-EDCH-Info RL-Specific-EDCH-Info,
    e-AGCH-PowerOffset
                            E-AGCH-PowerOffset
                                                                                                        OPTIONAL,
    e-RGCH-PowerOffset
                            E-RGCH-PowerOffset
                                                                                                        OPTIONAL,
    e-HICH-PowerOffset
                            E-HICH-PowerOffset
                                                                                                        OPTIONAL,
                            ProtocolExtensionContainer { { RL-Specific-EDCH-Information-Item-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
RL-Specific-EDCH-Information-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
RL-Specific-EDCH-Info ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF RL-Specific-EDCH-InfoItem
RL-Specific-EDCH-InfoItem ::= SEOUENCE {
    eDCH-MACdFlow-ID
                                        EDCH-MACdFlow-ID,
    bindingID
                                        BindingID
                                                             OPTIONAL,
    -- Shall be ignored if bearer establishment with ALCAP.
    transportLayerAddress
                                        TransportLayerAddress
                                                                     OPTIONAL,
    -- Shall be ignored if bearer establishment with ALCAP.
    iE-Extensions
                            ProtocolExtensionContainer { { RL-Specific-EDCH-Info-Item-ExtIEs } } OPTIONAL,
    . . .
RL-Specific-EDCH-Info-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-TransportBearerNotRequestedIndicator CRITICALITY ignore EXTENSION TransportBearerNotRequestedIndicator
                                                                                                                                  PRESENCE optional
    }, -- FDD only
    . . .
}
RLC-Mode
            ::= ENUMERATED
    rLC-AM,
    rLC-UM,
    . . .
DL-RLC-PDU-Size-Format ::= ENUMERATED {
    fixed-RLC-PDU-Size,
    flexible-RLC-PDU-Size,
    . . .
ļ
RLC-Sequence-Number
                       ::= INTEGER (0..127)
RNC-ID
                        ::= INTEGER (0..4095)
```

RNTI-Allocation-Indicator ::= ENUMERATED {

```
true
}
Round-Trip-Time-IncrDecrThres ::= INTEGER(0...32766)
Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in TS 25.133 [23]
RSCP-Value ::= INTEGER (0..127)
-- According to mapping in TS 25.123 [24]
RSCP-Value-IncrDecrThres ::= INTEGER (0..126)
Received-total-wide-band-power
                                            ::= INTEGER (0..621)
-- According to mapping in TS 25.133 [23]
RT-Load-Value-IncrDecrThres ::= INTEGER(0..100)
RT-Load-Value ::= INTEGER(0..100)
RTLoadValue ::= SEQUENCE {
       uplinkRTLoadValue
                                INTEGER(0..100),
       downlinkRTLoadValue
                               INTEGER(0..100)
}
RxTimingDeviationForTA
                                   ::= INTEGER (0..127)
-- As specified in TS 25.435 [5], ch. 6.2.7.6
-- For 1.28Mcps TDD this IE must be set to 0.
RxTimingDeviationForTAext
                                       ::= INTEGER (0..511)
-- As specified in TS 25.435 [5] [3.84 Mcps TDD only]
RxTimingDeviationForTA768
                                       ::= INTEGER (0.. 1023)
-- As specified in TS 25.435 [5]
Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
--According to mapping in TS 25.123 [24] [3.84Mcps TDD only]
Rx-Timing-Deviation-Value-ext ::= INTEGER (0..32767)
--According to mapping in TS 25.123 [24] [3.84Mcps TDD only]
Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..511)
--According to mapping in TS 25.123 [24] [1.28Mcps TDD only]
Rx-Timing-Deviation-Value-768 ::= INTEGER (0..65535)
--According to mapping in TS 25.123 [24] [7.68Mcps TDD only]
RefBeta ::= INTEGER (-15..16)
-- S
SAC
                   ::= OCTET STRING (SIZE (2))
```

SAI ::= SEQUENCE { pLMN-Identity PLMN-Identity, 1AC LAC. sAC SAC, iE-Extensions ProtocolExtensionContainer { {SAI-ExtIEs} } OPTIONAL 3 SAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= { . . . SAT-ID ::= INTEGER (0..63) SCH-TimeSlot ::= INTEGER (0...6)ScaledAdjustmentRatio ::= INTEGER(0..100) -- AdjustmentRatio = ScaledAdjustmentRatio / 100 SchedulingInformation ::= ENUMERATED { included. not-included SDPCCH-PowerOffsetInformation ::= INTEGER (0..6,...) 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 RNSAP-PROTOCOL-EXTENSION ::= { {ID id-MIMO-ActivationIndicator CRITICALITY ignore EXTENSION MIMO-ActivationIndicator PRESENCE optional} {ID id-EDCH-Indicator CRITICALITY ignore EXTENSION NULL PRESENCE optional } {ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator PRESENCE optional } | { ID id-MIMO-withfourtransmitantennas-ActivationIndicator CRITICALITY ignore EXTENSION MIMO-withfourtransmitantennas-ActivationIndicator PRESENCE optional } { ID id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator CRITICALITY ignore EXTENSION DualStream-MIMO-withfourtransmitantennas-ActivationIndicator PRESENCE optional} { ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator CRITICALITY ignore EXTENSION  ${\tt PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasRequestIndicator}$ PRESENCE optional }, . . . Secondary-CCPCH-Info-TDD::= SEQUENCE { dl-TFCS TFCS, tFCI-Coding TFCI-Coding,

```
secondary-CCPCH-TDD-InformationList
                                             Secondary-CCPCH-TDD-InformationList,
    fACH-InformationList
                                             FACH-InformationList,
    pCH-InformationList
                                             PCH-InformationList.
    iE-Extensions
                                             ProtocolExtensionContainer { { Secondary-CCPCH-Info-TDD-ExtIEs } } OPTIONAL,
    . . .
Secondary-CCPCH-Info-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Secondary-CPICH-Information ::= SEQUENCE {
   dl-ScramblingCode
                                             DL-ScramblingCode,
   fDD-DL-ChannelisationCodeNumber
                                             FDD-DL-ChannelisationCodeNumber,
                                             ProtocolExtensionContainer { { Secondary-CPICH-Information-ExtIEs } } OPTIONAL,
  iE-Extensions
    . . .
Secondary-CPICH-Information-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Secondary-CPICH-Information-Change ::= CHOICE {
new-secondary-CPICH
                                     Secondary-CPICH-Information,
secondary-CPICH-shall-not-be-used NULL,
. . .
}
Secondary-LCR-CCPCH-Info-TDD::= SEQUENCE {
    dl-TFCS
                                             TFCS,
    tFCI-Coding
                                             TFCI-Coding,
    secondary-LCR-CCPCH-TDD-InformationList Secondary-LCR-CCPCH-TDD-InformationList,
    fACH-InformationList
                                             FACH-InformationList,
    pCH-InformationList
                                             PCH-InformationList,
                                             ProtocolExtensionContainer { { Secondary-LCR-CCPCH-Info-TDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Secondary-LCR-CCPCH-Info-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
}
Secondary-CCPCH-Info-TDD768::= SEQUENCE {
    dl-TFCS
                                             TFCS,
    tFCI-Coding
                                             TFCI-Coding,
    secondary-CCPCH-TDD-InformationList768
                                                 Secondary-CCPCH-TDD-InformationList768,
    fACH-InformationList
                                             FACH-InformationList,
    pCH-InformationList
                                             PCH-InformationList,
    iE-Extensions
                                             ProtocolExtensionContainer { { Secondary-CCPCH-Info-TDD768-ExtIEs } } OPTIONAL,
    . . .
}
Secondary-CCPCH-Info-TDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

. . .

```
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```

```
Secondary-CCPCH-TDD-InformationList ::= SEOUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-CCPCH-TDD-InformationItem
Secondary-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType
                                    MidambleShiftAndBurstType,
    tFCI-Presence
                                    TFCI-Presence,
    secondary-CCPCH-TDD-Code-Information
                                                         Secondary-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset
                                    TDD-PhysicalChannelOffset,
    repetitionLength
                                    RepetitionLength,
                                    RepetitionPeriod,
    repetitionPeriod
                                    ProtocolExtensionContainer { { Secondary-CCPCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Secondary-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
Secondary-LCR-CCPCH-TDD-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-LCR-CCPCH-TDD-InformationItem
Secondary-LCR-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                                TimeSlotLCR,
    midambleShiftLCR
                                                MidambleShiftLCR,
    tFCI-Presence
                                                TFCI-Presence,
    secondary-LCR-CCPCH-TDD-Code-Information
                                                Secondary-LCR-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset
                                                TDD-PhysicalChannelOffset,
    repetitionLength
                                                RepetitionLength,
                                                RepetitionPeriod,
    repetitionPeriod
                                                ProtocolExtensionContainer { { Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Secondary-CCPCH-TDD-InformationList768 ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs768)) OF Secondary-CCPCH-TDD-InformationItem768
Secondary-CCPCH-TDD-InformationItem768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType768
                                        MidambleShiftAndBurstType768,
    tFCI-Presence
                                    TFCI-Presence,
    secondary-CCPCH-TDD-Code-Information768
                                                         Secondary-CCPCH-TDD-Code-Information768,
    tDD-PhysicalChannelOffset
                                    TDD-PhysicalChannelOffset,
    repetitionLength
                                    RepetitionLength,
    repetitionPeriod
                                    RepetitionPeriod,
    iE-Extensions
                                    ProtocolExtensionContainer { { Secondary-CCPCH-TDD-InformationItem768-ExtIEs } } OPTIONAL,
    . . .
}
Secondary-CCPCH-TDD-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
Secondary-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-TDD-Code-InformationItem
Secondary-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCode
                                    TDD-ChannelisationCode,
                                    ProtocolExtensionContainer { {Secondary-CCPCH-TDD-Code-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
}
Secondary-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
٦
Secondary-LCR-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs)) OF Secondary-LCR-CCPCH-TDD-Code-InformationItem
Secondary-LCR-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCodeLCR
                                    TDD-ChannelisationCodeLCR,
                                    TDD-DL-DPCH-TimeSlotFormat-LCR,
    s-CCPCH-TimeSlotFormat-LCR
                                    ProtocolExtensionContainer { {Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
Secondary-CCPCH-TDD-Code-Information768 ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs768)) OF Secondary-CCPCH-TDD-Code-InformationItem768
Secondary-CCPCH-TDD-Code-InformationItem768 ::= SEQUENCE {
    tDD-ChannelisationCode768
                                        TDD-ChannelisationCode768,
    iE-Extensions
                                    ProtocolExtensionContainer { {Secondary-CCPCH-TDD-Code-InformationItem768-ExtIEs} } OPTIONAL,
    . . .
Secondary-CCPCH-TDD-Code-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Secondary-Serving-Cell-List ::= SEQUENCE {
    possible-Secondary-Serving-Cell-List
                                                                 Possible-Secondary-Serving-Cell-List,
    iE-Extensions
                                ProtocolExtensionContainer { { Secondary-Serving-Cell-List-ExtIEs } }
                                                                                                                  OPTIONAL,
    . . .
Secondary-Serving-Cell-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-Multicell-EDCH-Restriction
                                            CRITICALITY iqnore
                                                                     EXTENSION Multicell-EDCH-Restriction
                                                                                                                  PRESENCE optional },
    -- This IE shall never be included. If received it shall be ignored.
    . . .
}
```

--"maxNrOfHSDSCH-1" represents the maximum number of possible secondary serving cells for a Multi Cell/Dual-Band capable cell when it applies to the range of "Possible-Secondary-Serving-Cell-List".

```
Possible-Secondary-Serving-Cell-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Possible-Secondary-Serving-Cell
Possible-Secondary-Serving-Cell ::= SEQUENCE {
    C-TD
                                C-ID.
    iE-Extensions
                                ProtocolExtensionContainer { { Possible-Secondary-Serving-Cell-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
Possible-Secondary-Serving-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-Multicell-EDCH-Restriction
                                            CRITICALITY ignore EXTENSION Multicell-EDCH-Restriction
                                                                                                           PRESENCE optional },
    . . .
ι
SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeslot-related,
    . . .
Secondary-UL-Frequency-Activation-State ::= ENUMERATED {
    activated.
    deactivated,
        . . .
S-E-DPCCH-PowerOffset ::= INTEGER(0..17,...)
Seed ::= INTEGER (0..63)
Service-ID ::= OCTET STRING (SIZE (3))
S-E-ROCH-Release-Indicator ::= ENUMERATED {s-E-ROCHreleased}
SetsOfHS-SCCH-Codes ::= SEOUENCE (SIZE (1..maxNrOfHSDSCH)) OF SetsOfHS-SCCH-CodesItem
SetsOfHS-SCCH-CodesItem ::= SEQUENCE {
    hS-SCCH-PreconfiguredCodes
                                    HS-SCCH-PreconfiguredCodes,
                        HSDSCH-RNTI,
    hSDSCH-RNTI
    hSPDSCH-and-HSSCCH-ScramblingCode
                                            DL-ScramblingCode,
                                            SixtyfourQAM-DL-SupportIndicator
    sixtyfourQAM-DL-SupportIndicator
                                                                                     OPTIONAL,
    sixtyfourQAM-DL-UsageIndicator
                                        SixtyfourQAM-DL-UsageIndicator
                                                                             OPTIONAL,
    hSDSCH-TBSizeTableIndicator
                                    HSDSCH-TBSizeTableIndicator
                                                                             OPTIONAL,
                                     ProtocolExtensionContainer { { SetsOfHS-SCCH-CodesItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
SetsOfHS-SCCH-CodesItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ID id-MIMO-InformationResponse
                                                     CRITICALITY ignore EXTENSION MIMO-InformationResponse
                                                                                                                                  PRESENCE optional }
{ID id-power-offset-for-S-CPICH-for-MIMO
                                                     CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMO
                                                                                                                                  PRESENCE optional }
{ID id-Measurement-Power-Offset
                                                     CRITICALITY ignore EXTENSION Measurement-Power-Offset
                                                                                                                                  PRESENCE optional }
{ ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas CRITICALITY ignore EXTENSION
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennas
                                                                 PRESENCE optional },
    . . .
```

}

```
Setup-Or-ConfigurationChange-Or-Removal-Of-EDCH-On-secondary-UL-Frequency::= CHOICE {
    setup
                            Additional-EDCH-Setup-Info,
    configurationChange
                            Additional-EDCH-Cell-Information-ConfigurationChange-List,
    removal
                            Additional-EDCH-Cell-Information-Removal-List,
    . . .
Setup-Or-ConfigurationChange-Or-Removal-Of-UL-CLTD ::= CHOICE {
                            UL-CLTD-Information,
    setup
    configurationChange
                            UL-CLTD-Information-To-Modify,
    removal
                            UL-CLTD-Information-Removal,
    . . .
Setup-Or-ConfigurationChange-Or-Removal-Of-FTPICH-Information ::= CHOICE {
                            FTPICH-Information,
    setup
    configurationChange
                            FTPICH-Information-To-Modify,
    removal
                            FTPICH-Information-Removal,
    . . .
SFN ::= INTEGER (0..4095)
SFNSFN-FDD ::= INTEGER(0..614399)
SFNSFN-TDD ::= INTEGER(0..40961)
SFNSFN-TDD768 ::= INTEGER(0..81923)
GA-AccessPointPositionwithOptionalAltitude ::= SEQUENCE
    qeoqraphicalCoordinate
                                                GeographicalCoordinate,
    altitudeAndDirection
                                                GA-AltitudeAndDirection OPTIONAL,
                                                 ProtocolExtensionContainer { { GA-AccessPointPositionwithOptionalAltitude-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
GA-AccessPointPositionwithOptionalAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
SFNSFNMeasurementValueInformation ::= SEQUENCE {
    successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation
                                                                                          SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
        SEOUENCE {
            uC-ID
                        UC-ID,
            sFNSFNValue
                                        SFNSFNValue,
            sFNSFNQuality
                                        SFNSFNQuality
                                                                         OPTIONAL,
            sFNSFNDriftRate
                                        SFNSFNDriftRate,
            sFNSFNDriftRateQuality
                                        SFNSFNDriftRateQuality
                                                                     OPTIONAL,
            sFNSFNTimeStampInformation SFNSFNTimeStampInformation,
                                        ProtocolExtensionContainer { {
            iE-Extensions
SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs } }
                                                                                                  OPTIONAL,
            . . .
       },
    unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation
                                                                                          SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
        SEOUENCE {
            uC-ID
                        UC-ID,
            iE-Extensions
                                ProtocolExtensionContainer { {    UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} }
                OPTIONAL,
           . . .
       },
                        ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs } }
    iE-Extensions
                                                                                                                   OPTIONAL,
    . . .
}
SFNSFNMeasurementValueInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
SFNSFNQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip
SFNSFNTimeStampInformation ::= CHOICE {
    sFNSFNTimeStamp-FDD
                            SFN,
```

```
sFNSFNTimeStamp-TDD
                            SFNSFNTimeStamp-TDD,
    . . .
}
SFNSFNTimeStamp-TDD::= SEQUENCE {
    sFN
                        SFN,
    timeSlot
                        TimeSlot,
    iE-Extensions
                                    ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs} } OPTIONAL,
    . . .
}
SFNSFNTimeStamp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
SFNSFNValue ::= CHOICE {
    sFNSFN-FDD
                    SFNSFN-FDD,
    sFNSFN-TDD
                    SFNSFN-TDD,
                                    -- LCR & HCR TDD
    ...,
    sFNSFN-TDD768
                        SFNSFN-TDD768
}
SID ::= INTEGER (0..maxNrOfPDUIndexes-1)
Single-Stream-MIMO-ActivationIndicator ::= NULL
Single-Stream-MIMO-Mode-Indicator ::= ENUMERATED {
    activate,
    deactivate
}
SIR-Error-Value
                       ::= INTEGER (0..125)
SIR-Error-Value-IncrDecrThres
                                        ::= INTEGER (0..124)
SIR-Value
                        ::= INTEGER (0..63)
-- According to mapping in TS 25.215 [11]/TS 25.225 [14]
SIR-Value-IncrDecrThres ::= INTEGER (0..62)
SixteenQAM-UL-Operation-Indicator ::= ENUMERATED {
    activate,
    deactivate
}
SixtyfourQAM-UL-Operation-Indicator ::= ENUMERATED {
    activate,
    deactivate
}
```

```
SixtyfourQAM-UsageAllowedIndicator ::= ENUMERATED {
    allowed,
    not-allowed
SixtyfourQAM-DL-SupportIndicator ::= ENUMERATED {
    sixtyfourQAM-DL-supported,
    sixtyfourQAM-DL-not-supported
}
SixtyfourQAM-DL-UsageIndicator ::= ENUMERATED {
    sixtyfourQAM-DL-used,
    sixtyfourQAM-DL-not-used
}
SignatureSequenceGroupIndex ::= INTEGER (0..19)
SNA-Information ::= SEQUENCE {
   pLMN-Identity PLMN-Identity,
   listOfSNAs
                        ListOfSNAs
                                                                         OPTIONAL,
   iE-Extensions
                        ProtocolExtensionContainer { { SNA-Information-ExtIEs } } OPTIONAL,
   . . .
l
SNA-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
ListOfSNAs ::= SEQUENCE (SIZE (1.. maxNrOfSNAs)) OF SNACode
SNACode ::= INTEGER (0..65535)
SourceID ::= SAI
SpecialBurstScheduling ::= INTEGER (1..256)
SpeechVersion::= BIT STRING (SIZE (4))
S-RNTI
                        ::= INTEGER (0..1048575)
-- From 0 to 2^20-1
S-RNTI-Group
                        ::= SEQUENCE {
    sRNTI
                            S-RNTI,
    sRNTI-BitMaskIndex
                            ENUMERATED {
       b1,
        b2,
        b3,
        b4,
        b5,
       b6,
        b7,
        b8,
        b9,
```

```
b10,
       b11,
       b12,
       b13,
       b14,
       b15,
       b16,
       b17,
       b18,
       b19,...
SRB-Delay ::= INTEGER(0...7,...)
SSDT-SupportIndicator ::= ENUMERATED {
    not-Used-sSDT-supported,
    sSDT-not-supported
}
Standalone-Midamble-Channel-Indicator ::= ENUMERATED {
    used.
    not-used
}
Status-Flag ::= ENUMERATED {
    activate,
    deactivate
}
STTD-SupportIndicator ::= ENUMERATED {
    sTTD-Supported,
    sTTD-not-Supported
}
Support-8PSK ::= ENUMERATED {
    v8PSK-Supported
}
Support-PLCCH ::= ENUMERATED {
    vPLCCH-Supported
}
Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order ::= ENUMERATED {
    supported,
    not-supported
}
SyncCase ::= INTEGER (1..2,...)
SynchronisationConfiguration ::= SEQUENCE {
    n-INSYNC-IND
                            INTEGER (1..256),
```

```
INTEGER (1..256),
    n-OUTSYNC-IND
    t-RLFAILURE
                            INTEGER (0..255),
-- Unit seconds, Range 0s .. 25.5s, Step 0.1s
                            ProtocolExtensionContainer { { SynchronisationConfiguration-ExtIEs } }
    iE-Extensions
                                                                                                            OPTIONAL,
    . . .
}
SynchronisationConfiguration-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
SYNC-UL-ProcParameters ::= SEQUENCE
                                     ENUMERATED {v1, v2, v4, v8, ...},
    maxSYNC-UL-transmissions
    powerRampStep
                                     INTEGER (0..3, ...),
    . . .
-- Т
T1 ::= ENUMERATED {v10,v20,v30,v40,v50,v60,v70,v80,v90,v100,v120,v140,v160,v200,v300,v400,...}
TargetID ::= CGI
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,
    . . .
}
                                      ::= ENUMERATED
TDD-ChannelisationCode768
    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,
    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-ChannelisationCodeLCR ::= SEQUENCE {
    tDD-ChannelisationCode
                                     TDD-ChannelisationCode,
    modulation
                                     Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD or 7.68Mcps TDD
    . . .
TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF TDD-DCHs-to-ModifyItem
TDD-DCHs-to-ModifyItem ::= SEQUENCE {
    ul-FP-Mode
                                         UL-FP-Mode OPTIONAL,
    toAWS
                                         ToAWS
                                                     OPTIONAL,
    toAWE
                                         TOAWE
                                                     OPTIONAL,
    transportBearerRequestIndicator
                                         TransportBearerRequestIndicator,
    dCH-SpecificInformationList
                                         TDD-DCHs-to-ModifySpecificInformationList,
    iE-Extensions
                                         ProtocolExtensionContainer { {TDD-DCHs-to-ModifyItem-ExtIEs} } OPTIONAL,
    . . .
TDD-DCHs-to-ModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlOos
                                         CRITICALITY
                                                         ignore
                                                                      EXTENSION
                                                                                  TnlOos PRESENCE optional
                                                                                                                   },
    . . .
}
TDD-DCHs-to-ModifySpecificInformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF TDD-DCHs-to-ModifySpecificItem
TDD-DCHs-to-ModifySpecificItem ::= 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
                                     ProtocolExtensionContainer { {TDD-DCHs-to-ModifySpecificItem-ExtIEs} } OPTIONAL,
```

```
. . .
}
TDD-DCHs-to-ModifySpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Guaranteed-Rate-Information
                                             CRITICALITY ignore EXTENSION Guaranteed-Rate-Information
                                                                                                                   PRESENCE optional
                                                                                                                                          }|
                                CRITICALITY ignore EXTENSION TrafficClass
    { ID id-TrafficClass
                                                                                  PRESENCE optional },
    . . .
}
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,
    iE-Extensions
                                    ProtocolExtensionContainer { { TDD-DL-Code-InformationItem-ExtIEs } } OPTIONAL,
    . . .
3
TDD-DL-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHsLCR)) 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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
TDD-DL-Code-Information768 ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs768)) OF TDD-DL-Code-InformationItem768
TDD-DL-Code-InformationItem768 ::= SEQUENCE {
    dPCH-ID
                                    DPCH-ID,
    tDD-ChannelisationCode768
                                    TDD-ChannelisationCode768,
    iE-Extensions
                                    ProtocolExtensionContainer { {TDD-DL-Code-InformationItem768-ExtIEs} } OPTIONAL,
    . . .
}
TDD-DL-Code-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TDD-DL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
    qPSK
                                QPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK
                                EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    . . .
```

```
OPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
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,
    . . .
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,
    iE-Extensions
                                    ProtocolExtensionContainer { {TDD-UL-Code-InformationItem-ExtIEs} } OPTIONAL,
    . . .
}
TDD-UL-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHsLCR)) 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,
                                            ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs } }
    iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
}
TDD-UL-Code-LCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TDD-UL-Code-Information768 ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs768)) OF TDD-UL-Code-InformationItem768
```

```
TDD-UL-Code-InformationItem768 ::= SEQUENCE {
    dPCH-ID
                                    DPCH-ID.
    tDD-ChannelisationCode768
                                    TDD-ChannelisationCode768,
    iE-Extensions
                                    ProtocolExtensionContainer { { TDD-UL-Code-InformationItem768-ExtIEs } } OPTIONAL,
    . . .
TDD-UL-Code-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TDD-UL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
    qPSK
                                QPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK
                                EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
    . . .
}
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 ::= ENUMERATED {
    normal,
    not-Used-split
}
-- The value "Not Used" shall not be used by the SRNC. The procedure shall be rejected by the DRNC if the value "Not Used" is received.
TGD
                    ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence
                    ::= INTEGER (0..511)
TGPRC
-- 0 = infinity
TGPSID
                    ::= INTEGER (1.. maxTGPS)
TGSN
                  ::= INTEGER (0..14)
TimeSlot
                        ::= INTEGER (0..14)
TimeSlotLCR ::= INTEGER (0..6)
```

```
Time-Stamp ::= INTEGER (0...9999)
-- Unit: 10ms
TimingAdvanceApplied ::= ENUMERATED {
   yes,
    no
}
SynchronisationIndicator ::= ENUMERATED {
    timingMaintainedSynchronisation,
    . . .
}
TMGI
      ::= SEQUENCE
                      {
    plmn-id PLMN-Identity,
    service-id Service-ID,
                                    ProtocolExtensionContainer { { TMGI-ExtIEs} }
    iE-Extensions
                                                                                         OPTIONAL,
    . . .
}
TMGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TnlQos ::= CHOICE {
    dsField
                                DsField,
    genericTrafficCategory
                                GenericTrafficCategory,
    . . .
}
TOAWE
                        ::= INTEGER (0..2559)
TOAWS
                       ::= INTEGER (0..1279)
TraceDepth
                                ::= ENUMERATED {
   minimum,
    medium,
    maximum,
    . . .
}
TraceRecordingSessionReference ::= INTEGER (0..65535)
TraceReference
                                ::= OCTET STRING (SIZE (2..3))
TrafficClass ::= ENUMERATED {
    conversational,
    streaming,
    interactive,
    background,
    . . .
```

}

```
Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
    SEQUENCE {
       tGPSID
                        TGPSID.
       tGSN
                        TGSN,
       tGL1
                        GapLength,
        tGL2
                        GapLength
                                    OPTIONAL,
        † GD
                        TGD,
        tGPL1
                        GapDuration,
       not-to-be-used-1
                                    GapDuration OPTIONAL,
            -- 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 value of the UL/DL mode IE is "DL only" or "UL/DL"
       uplink-Compressed-Mode-Method
                                            Uplink-Compressed-Mode-Method
                                                                                OPTIONAL,
           -- This IE shall be present if the value of the UL/DL mode IE is "UL only" or "UL/DL"
        dL-FrameType
                            DL-FrameType,
        delta-SIR1
                        DeltaSIR,
        delta-SIR-after1 DeltaSIR,
       delta-STR2
                       DeltaSIR
                                    OPTIONAL,
       delta-SIR-after2 DeltaSIR OPTIONAL,
                                ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Information-ExtIEs } } OPTIONAL,
       iE-Extensions
        . . .
Transmission-Gap-Pattern-Sequence-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Transmission-Gap-Pattern-Sequence-ScramblingCode-Information
                                                               ::= ENUMERATED{
  code-change,
  nocode-change
Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
    SEOUENCE {
        tGPSID
                        TGPSID,
        tGPRC
                        TGPRC,
        tGCFN
                        CFN,
                            ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
        iE-Extensions
Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-Affected-HSDSCH-Serving-Cell-List CRITICALITY reject EXTENSION Affected-HSDSCH-Serving-Cell-List PRESENCE optional},
    . . .
}
Affected-HSDSCH-Serving-Cell-List ::= SEQUENCE (SIZE (0.. maxNrOfHSDSCH)) OF C-ID
TransmissionMode
                    ::=ENUMERATED {
    p-t-p,
   p-t-m,
```

```
not-provided,
    . . .
}
Transmission-Mode-Information::= SEOUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Transmission-Mode-Information-List
Transmission-Mode-Information-List ::= SEQUENCE {
    c-ID
                                         C-ID,
    transmissionMode
                                         TransmissionMode,
    iE-Extensions
                                         ProtocolExtensionContainer { { Transmission-Mode-Information-List-ExtIEs } } OPTIONAL,
    . . .
Transmission-Mode-Information-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    . . .
TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    dynamic,
    . . .
TransmitDiversityIndicator ::= ENUMERATED
    active,
    inactive
}
Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- according to mapping in TS 25.133 [23] and TS 25.123 [24]
Transmitted-Carrier-Power-Value-IncrDecrThres ::= INTEGER(0..100)
-- according to mapping in TS 25.133 [23] and TS 25.123 [24]
Transport-Block-Size-Index ::= INTEGER(1..maxNrOfHS-DSCHTBSs)
TUTRANGANSS ::= SEQUENCE {
    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,
                            ProtocolExtensionContainer { { TUTRANGANSSMeasurementThresholdInformation-Extles } }
    ie-Extensions
                                                                                                                      OPTIONAL,
    . . .
TUTRANGANSSMeasurementThresholdInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TUTRANGANSSMeasurementValueInformation ::= SEQUENCE {
    tUTRANGANSS
                                     TUTRANGANSS,
    tUTRANGANSSQuality
                                    INTEGER(0..255)
    OPTIONAL,
    tUTRANGANSSDriftRate
                                     INTEGER(-50..50),
    tUTRANGANSSDriftRateQuality
                                    INTEGER(0..50)
    OPTIONAL,
                                     ProtocolExtensionContainer { { TUTRANGANSSMeasurementValueInformation-ExtIEs } }
    ie-Extensions
                                                                                                                           OPTIONAL,
    . . .
TUTRANGANSSMeasurementValueInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GANSS-Time-ID
                                     CRITICALITY ignore
                                                             EXTENSION GANSS-Time-ID
                                                                                          PRESENCE
                                                                                                                       optional},
    . . .
}
TUTRANGPS ::= SEQUENCE {
                INTEGER (0..16383),
    ms-part
    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,
    iE-Extensions
                                    ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
l
TUTRANGPSMeasurementThresholdInformation-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
        tUTRANGPS
                                        TUTRANGPS,
        tUTRANGPSQuality
                                        TUTRANGPSQuality
                                                                         OPTIONAL,
        tUTRANGPSDriftRate
                                        TUTRANGPSDriftRate,
        tUTRANGPSDriftRateQuality
                                        TUTRANGPSDriftRateQuality
                                                                         OPTIONAL,
        iEe-Extensions
                                         ProtocolExtensionContainer { { TUTRANGPSMeasurementValueInformationItem-ExtIEs } }
                                                                                                                                          OPTIONAL
        . . .
TUTRANGPSMeasurementValueInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TUTRANGPSQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip
TransportBearerID
                        ::= INTEGER (0..4095)
TransportBearerRequestIndicator
                                    ::= ENUMERATED
    bearer-requested,
    bearer-not-requested,
    . . .
TransportBearerNotRequestedIndicator
                                             ::= ENUMERATED {
    transport-bearer-shall-not-be-established,
    transport-bearer-may-not-be-established
}
TransportBearerNotSetupIndicator
                                        ::= ENUMERATED {
    transport-bearer-not-setup
}
TransportBlockSize
                            ::= INTEGER (0..5000)
-- Unit is bits
TransportFormatCombination-Beta ::= CHOICE {
```

```
signalledGainFactors
                            SEQUENCE {
       betaC
                                BetaCD.
       betaD
                                BetaCD.
       refTFCNumber
                                RefTFCNumber
                                                 OPTIONAL,
       iE-Extensions
                                ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs } } OPTIONAL,
        . . .
    },
    refTFCNumber
                            RefTFCNumber.
    . . .
SignalledGainFactors-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
ι
TFCS ::= SEQUENCE {
    tFCSvalues
                        CHOICE {
       no-Split-in-TFCI
                                     TFCS-TFCSList,
       not-Used-split-in-TFCI
                                    NULL,
       -- This choice shall never be made by the SRNC and the DRNC shall consider the procedure as failed if it is received.
        . . .
    },
                       ProtocolExtensionContainer { { TFCS-ExtIEs} }
    iE-Extensions
                                                                              OPTIONAL,
    . . .
TFCS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCs)) OF
    SEQUENCE {
        CTFC
                            TFCS-CTFC,
       tFC-Beta
                        TransportFormatCombination-Beta
                                                             OPTIONAL,
        -- The IE shall be present if the TFCS concerns a UL DPCH [FDD - or PRACH channel in FDD]
                            ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs } }
       iE-Extensions
                                                                                        OPTIONAL,
    . . .
}
TFCS-TFCSList-ExtIEs RNSAP-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)
}
TransportFormatSet ::= SEQUENCE {
```

```
dynamicParts
                            TransportFormatSet-DynamicPartList,
    semi-staticPart
                            TransportFormatSet-Semi-staticPart,
    iE-Extensions
                            ProtocolExtensionContainer { {TransportFormatSet-ExtIEs} } OPTIONAL,
    . . .
TransportFormatSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
    SEQUENCE {
        nrOfTransportBlocks
                                NrOfTransportBlocks,
        transportBlockSize
                                TransportBlockSize
                                                         OPTIONAL
        -- This IE shall be present if nrOfTransportBlocks is greater than 0 --,
        mode
                            TransportFormatSet-ModeDP,
                                ProtocolExtensionContainer { {TransportFormatSet-DynamicPartList-ExtIEs} } OPTIONAL,
        iE-Extensions
        . . .
TransportFormatSet-DynamicPartList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
TransportFormatSet-ModeDP ::= CHOICE {
                        TDD-TransportFormatSet-ModeDP,
    t.dd
                        NULL,
    notApplicable
    . . .
TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
    transmissionTimeIntervalInformation
                                            TransmissionTimeIntervalInformation
                                                                                     OPTIONAL,
    -- This IE shall be present if the "Transmission Time Interval" of the "Semi-static Transport Format Information" is "dynamic". Otherwise it is
absent.
                                             ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
TDD-TransportFormatSet-ModeDP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-Count)) OF
    SEQUENCE {
        transmissionTimeInterval
                                    TransmissionTimeIntervalDvnamic,
                                ProtocolExtensionContainer { {TransmissionTimeIntervalInformation-ExtIEs} } OPTIONAL,
        iE-Extensions
        . . .
TransmissionTimeIntervalInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
Transmitted-Code-Power-Value ::= INTEGER (0..127)
```

-- According to mapping in TS 25.215 [11]/TS 25.225 [14]

```
Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)
TransportFormatManagement ::= ENUMERATED {
    cell-based,
    ue-based,
    . . .
}
TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTime
                            TransmissionTimeIntervalSemiStatic,
    channelCoding
                            ChannelCodingType,
    codingRate
                        CodingRate
                                                 OPTIONAL
    -- This IE shall be present if channelCoding is `convolutional' or `turbo' --,
    rateMatcingAttribute
                                RateMatchingAttribute,
    cRC-Size
                        CRC-Size,
                        TransportFormatSet-ModeSSP,
    mode
                            ProtocolExtensionContainer { {TransportFormatSet-Semi-staticPart-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
TransportFormatSet-Semi-staticPart-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
TransportFormatSet-ModeSSP ::= CHOICE {
    tdd
                    SecondInterleavingMode,
    notApplicable
                            NULL,
    . . .
}
TransportLayerAddress
                                ::= BIT STRING (SIZE(1..160, ...))
TrCH-SrcStatisticsDescr
                            ::= ENUMERATED {
    speech,
    rRC,
    unknown,
    . . .
TSN-Length ::= ENUMERATED {
    tsn-6bits,
    tsn-9bits
}
TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
}
TSTD-Support-Indicator ::= ENUMERATED {
    tSTD-supported,
    tSTD-not-supported
```

```
}
TxDiversityIndicator
                       ::= ENUMERATED {
    true,
    false
}
TypeOfError ::= ENUMERATED {
    not-understood,
    missing,
    . . .
}
-- U
UARFCN
                        ::= INTEGER (0..16383,...)
-- Corresponds to: 0.0Hz..3276.6Mhz. See TS 25.105 [7], TS 25.101 [43]
UDRE ::= ENUMERATED {
    lessThan1,
    between1-and-4,
    between4-and-8,
    over8,
    . . .
UDREGrowthRate ::=
                                     ENUMERATED {
                                         growth-1-point-5,
                                         growth-2,
                                         growth-4,
                                         growth-6,
                                         growth-8,
                                         growth-10,
                                         growth-12,
                                         growth-16
                                     ENUMERATED {
UDREValidityTime
                    : : =
                                         val-20sec,
                                         val-40sec,
                                         val-80sec,
                                         val-160sec,
                                         val-320sec,
                                         val-640sec,
                                         val-1280sec,
                                         val-2560sec }
UE-AggregateMaximumBitRate ::= SEQUENCE {
    uE-AggregateMaximumBitRateDownlink
                                             UE-AggregateMaximumBitRateDownlink OPTIONAL,
    uE-AggregateMaximumBitRateUplink
                                             UE-AggregateMaximumBitRateUplink
    . . .
}
UE-AggregateMaximumBitRateDownlink
                                             ::= INTEGER (1..100000000)
```

-- Unit is bits per sec

OPTIONAL,

```
UE-AggregateMaximumBitRateUplink
                                            ::= INTEGER (1..100000000)
-- Unit is bits per sec
UE-AggregateMaximumBitRate-Enforcement-Indicator ::= NULL
UE-Capabilities-Info ::= SEQUENCE {
    hSDSCH-Physical-Layer-Category
                                        INTEGER (1...64,...),
    iE-Extensions
                                        ProtocolExtensionContainer { { UE-Capabilities-Info-ExtIEs } }
                                                                                                                          OPTIONAL,
UE-Capabilities-Info-ExtIEs RNSAP-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-MIMO-SFMode-Supported-For-HSPDSCHDualStream
                                                        CRITICALITY ignore EXTENSION MIMO-SFMode-For-HSPDSCHDualStream
                                                                                                                                 PRESENCE optional }
    ID id-MultiCarrier-HSDSCH-Physical-Layer-Category
                                                        CRITICALITY ignore EXTENSION LCRTDD-HSDSCH-Physical-Layer-Category
                                                                                                                                 PRESENCE optional }
    {ID id-UE-TS0-CapabilityLCR
                                                         CRITICALITY ignore EXTENSION UE-TS0-CapabilityLCR
                                                                                                                                 PRESENCE optional }
    ID id-UE-RF-Band-CapabilityLCR
                                                         CRITICALITY ignore EXTENSION UE-RF-Band-CapabilityLCR
                                                                                                                                 PRESENCE
conditional},
    . . .
UE-TSO-CapabilityLCR ::= ENUMERATED {
    tS0-Capable,
    tS0-Not-Capable
}
UE-RF-Band-CapabilityLCR ::= SEQUENCE (SIZE (1.. maxFreqBandsTDD)) OF Radio-Frequency-BandItem
Radio-Frequency-BandItem ::= SEQUENCE {
    radio-Frequency-Band
                                            Radio-Frequency-Band,
    iE-Extensions
                                            ProtocolExtensionContainer { { Radio-Frequency-BandItem-ExtIEs } }
                                                                                                                                 OPTIONAL,
    . . .
Radio-Frequency-Band ::= ENUMERATED {
    a,
    b,
    c,
    d,
    e,
    f,
    q,
    h,
    i,
    j,
    k,
    1,
    m,
    n,
    ο,
    p,
```

```
. . .
}
Radio-Frequency-BandItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
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
                            ::= CHOICE {
UEIdentity
    imsi
                IMSI,
    imei
                IMEI,
                IMEISV,
    imeisv
    . . .
}
UEMeasurementHysteresisTime ::= INTEGER (0..15)
    -- Unit dB
    -- Range 0..7.5 dB
    -- Step 0.5 dB
UEMeasurementParameterModAllow ::= ENUMERATED {
```

```
parameterModificationAllowed,
UEMeasurementReportCharacteristics ::= CHOICE {
                        UEMeasurementReportCharacteristicsPeriodic,
    periodic
    event1h
                        UEMeasurementReportCharacteristicsEvent1h,
                        UEMeasurementReportCharacteristicsEvent1i,
    event1i
    event6a
                        UEMeasurementReportCharacteristicsEvent6a,
                        UEMeasurementReportCharacteristicsEvent6b,
    event6b
                        UEMeasurementReportCharacteristicsEvent6c,
    event6c
                        UEMeasurementReportCharacteristicsEvent6d,
    event6d
    . . . .
    extension-ReportCharacteristics
                                         UEMeasurementReportCharacteristics-Extension
UEMeasurementReportCharacteristicsEvent1h ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurementThreshold,
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    uEMeasurementHysteresisTime UEMeasurementHysteresisTime,
    iE-Extensions
                                ProtocolExtensionContainer {
                                                              { UEMeasurementReportCharacteristicsEvent1h-ExtIEs } } OPTIONAL,
    . . .
UEMeasurementReportCharacteristicsEvent1h-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UEMeasurementReportCharacteristicsEvent1i ::= SEQUENCE {
                                UEMeasurementThreshold,
    uEMeasurementTreshold
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    uEMeasurementHysteresisTime UEMeasurementHysteresisTime,
    iE-Extensions
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEventli-ExtIEs } } OPTIONAL,
    . . .
UEMeasurementReportCharacteristicsEvent1i-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UEMeasurementReportCharacteristicsEvent6a ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurementThreshold,
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    iE-Extensions
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6a-ExtIEs } } OPTIONAL,
    . . .
UEMeasurementReportCharacteristicsEvent6a-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UEMeasurementReportCharacteristicsEvent6b ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurementThreshold,
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
```

```
ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6b-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UEMeasurementReportCharacteristicsEvent6b-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UEMeasurementReportCharacteristicsEvent6c ::= SEQUENCE {
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
                                 ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6c-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
}
UEMeasurementReportCharacteristicsEvent6c-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UEMeasurementReportCharacteristicsEvent6d ::= SEQUENCE {
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    iE-Extensions
                                 ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6d-ExtIEs } } OPTIONAL,
    . . .
}
UEMeasurementReportCharacteristicsEvent6d-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UEMeasurementReportCharacteristicsPeriodic ::= SEQUENCE
    amountofReporting
                            UEMeasurementReportCharacteristicsPeriodicAmountofReporting,
    reportingInterval
                            UEMeasurementReportCharacteristicsPeriodicReportingInterval,
    iE-Extensions
                            ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsPeriodic-ExtIEs } } OPTIONAL,
    . . .
}
UEMeasurementReportCharacteristicsPeriodicAmountofReporting::= ENUMERATED {
    r1,
    r2,
    r4,
    r8,
    r16,
    r32,
    r64,
    rInfinity
UEMeasurementReportCharacteristicsPeriodicReportingInterval::= ENUMERATED {
    r250,
    r500,
    r1000,
    r2000,
    r3000,
    r4000,
    r6000,
```

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r8000,
   r12000,
    r16000,
   r20000,
   r24000,
   r28000,
    r32000,
    r64000
}
UEMeasurementReportCharacteristicsPeriodic-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UEMeasurementReportCharacteristics-Extension ::= ProtocolIE-Single-Container {{ UEMeasurementReportCharacteristics-ExtensionIE }}
UEMeasurementReportCharacteristics-ExtensionIE RNSAP-PROTOCOL-IES ::= {
    . . .
}
UEMeasurementThreshold
                            ::= CHOICE {
    timeslotISCP
                                UEMeasurementThresholdDLTimeslotISCP,
                                    UEMeasurementThresholdUETransmitPower,
   uETransmitPower
    . . . .
    extension-UEMeasurementThreshold UEMeasurementThreshold-Extension
}
UEMeasurementThresholdDLTimeslotISCP ::=
                                            INTEGER(-115..-25)
UEMeasurementThresholdUETransmitPower ::=
                                            INTEGER(-50..33)
UEMeasurementThreshold-Extension
                                   ::= ProtocollE-Single-Container {{ UEMeasurementThreshold-ExtensionIE }}
UEMeasurementThreshold-ExtensionIE RNSAP-PROTOCOL-IES ::= {
    . . .
UEMeasurementTimeslotInfoHCR::= SEOUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementTimeslotInfoHCR-IEs
UEMeasurementTimeslotInfoHCR-IEs ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
   burstType
                                    UEMeasurementTimeslotInfoHCRBurstType,
   iE-Extensions
                                    ProtocolExtensionContainer { { UEMeasurementTimeslotInfoHCR-IEs-ExtIEs } }
                                                                                                                         OPTIONAL,
    . . .
}
UEMeasurementTimeslotInfoHCRBurstType ::= ENUMERATED {
    type1,
   type2,
    type3,
    . . .
}
```

```
UEMeasurementTimeslotInfoHCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

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. . .
}
UEMeasurementTimeslotInfoLCR::= SEQUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementTimeslotInfoLCR-IEs
UEMeasurementTimeslotInfoLCR-IEs ::= SEQUENCE {
    timeSlot
                                     TimeSlotLCR,
    iE-Extensions
                                     ProtocolExtensionContainer { { UEMeasurementTimeslotInfoLCR-IEs-ExtIEs } }
                                                                                                                             OPTIONAL,
    . . .
}
UEMeasurementTimeslotInfoLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UEMeasurementTimeslotInfo768::= SEOUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementTimeslotInfo768-IEs
UEMeasurementTimeslotInfo768-IEs ::= SEQUENCE {
    timeSlot
                                     TimeSlot,
    burstType
                                     UEMeasurementTimeslotInfo768BurstType,
    iE-Extensions
                                     ProtocolExtensionContainer { { UEMeasurementTimeslotInfo768-IEs-ExtIEs } }
                                                                                                                             OPTIONAL,
    . . .
}
UEMeasurementTimeslotInfo768BurstType ::= ENUMERATED {
    type1,
    type2,
    type3,
    . . .
}
UEMeasurementTimeslotInfo768-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UEMeasurementTimeToTrigger ::= ENUMERATED {
    r0,
    r10,
    r20,
    r40,
    r60,
    r80,
    r100,
    r120,
    r160,
    r200,
    r240,
    r320,
    r640,
    r1280,
    r2560,
    r5000
```

```
UEMeasurementType ::= ENUMERATED {
    primary-CCPCH-RSCP,
    dL-Timeslot-ISCP,
    uE-Transmitted-power,
    . . .
UEMeasurementValue ::= CHOICE {
    uE-Transmitted-Power
                                UE-MeasurementValue-UE-Transmitted-Power,
    primary-CCPCH-RSCP
                                UE-MeasurementValue-Primary-CCPCH-RSCP,
    dL-Timeslot-ISCP
                                UE-MeasurementValue-DL-Timeslot-ISCP,
    . . . ,
    extension-UEMeasurementValue
                                        UEMeasurementValue-Extension
UE-MeasurementValue-UE-Transmitted-Power ::= SEQUENCE {
    uEMeasurementTransmittedPowerListHCR
                                                UEMeasurementValueTransmittedPowerListHCR
                                                                                             OPTIONAL,
-- Mandatory for 3.84Mcps TDD, Not applicable for 1.28Mcps TDD or 7.68Mcps TDD
    uEMeasurementTransmittedPowerListLCR
                                                UEMeasurementValueTransmittedPowerListLCR
                                                                                             OPTIONAL,
-- Mandatory for 1.28Mcps TDD, Not applicable for 3.84Mcps TDD or 7.68Mcps TDD
                                                ProtocolExtensionContainer { { UE-MeasurementValue-UE-Transmitted-Power-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
UE-MeasurementValue-UE-Transmitted-Power-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UEMeasurementValueTransmittedPowerList768
                                                                CRITICALITY ignore EXTENSION UEMeasurementValueTransmittedPowerList768
        PRESENCE optional },
    . . .
}
UEMeasurementValueTransmittedPowerListHCR ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTransmittedPowerListHCR-IEs
UEMeasurementValueTransmittedPowerListHCR-IEs ::= SEOUENCE {
    timeSlot
                                    TimeSlot,
    uETransmitPower
                                    INTEGER(0..104),
    -- mapping according to TS 25.123 [24], values 0..20 not used
                                                ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerListHCR-IEs-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
UEMeasurementValueTransmittedPowerListHCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementValueTransmittedPowerListLCR ::= SEQUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementValueTransmittedPowerListLCR-IEs
UEMeasurementValueTransmittedPowerListLCR-IEs ::= SEQUENCE {
    timeSlotLCR
                                    TimeSlotLCR,
    uETransmitPower
                                    INTEGER(0..104),
    -- mapping according to TS 25.123 [24], values 0..20 not used
```

```
ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerListLCR-IEs-ExtIEs } }
    iE-Extensions
    OPTIONAL.
    . . .
UEMeasurementValueTransmittedPowerListLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UEMeasurementValueTransmittedPowerList768 ::= SEOUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTransmittedPowerList768-IEs
UEMeasurementValueTransmittedPowerList768-IEs ::= SEQUENCE {
    timeSlot
                                    TimeSlot.
   uETransmitPower
                                    INTEGER(0..104),
    -- mapping according to TS 25.123 [24], values 0..20 not used
   iE-Extensions
                                                ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerList768-IEs-ExtIEs } }
    OPTIONAL,
    . . .
}
UEMeasurementValueTransmittedPowerList768-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UE-MeasurementValue-Primary-CCPCH-RSCP::= SEQUENCE
    primaryCCPCH-RSCP
                                        PrimaryCCPCH-RSCP
                                                                         OPTIONAL,
    primaryCCPCH-RSCP-Delta
                                        PrimaryCCPCH-RSCP-Delta
                                                                         OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { UE-MeasurementValue-Primary-CCPCH-RSCP-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
UE-MeasurementValue-Primary-CCPCH-RSCP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UE-MeasurementValue-DL-Timeslot-ISCP ::= SEQUENCE {
    uEMeasurementTimeslotISCPListHCR
                                            UEMeasurementValueTimeslotISCPListHCR
                                                                                     OPTIONAL,
-- Mandatory for 3.84Mcps TDD, Not applicable for 1.28Mcps TDD or 7.68Mcps TDD
    uEMeasurementTimeslotISCPListLCR
                                           UEMeasurementValueTimeslotISCPListLCR
                                                                                     OPTIONAL,
-- Mandatory for 1.28Mcps TDD, Not applicable for 3.84Mcps TDD or 7.68Mcps TDD
    iE-Extensions
                                                ProtocolExtensionContainer { { UE-MeasurementValue-DL-Timeslot-ISCP-ExtIEs } }
                                                                                                                                         OPTIONAL,
    . . .
}
UE-MeasurementValue-DL-Timeslot-ISCP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UEMeasurementValueTimeslotISCPList768
                                                            CRITICALITY ignore EXTENSION UEMeasurementValueTimeslotISCPList768
    PRESENCE optional },
    . . .
}
UEMeasurementValueTimeslotISCPListHCR ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTimeslotISCPListHCR-IEs
UEMeasurementValueTimeslotISCPListHCR-IEs ::= SEQUENCE {
```

```
timeSlot
                                    TimeSlot,
    dL-TimeslotISCP
                                    DL-TimeslotISCP,
    iE-Extensions
                                    ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPListHCR-IEs-ExtIEs } }
                                                                                                                                  OPTIONAL.
    . . .
UEMeasurementValueTimeslotISCPListHCR-IES-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UEMeasurementValueTimeslotISCPListLCR := SEOUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementValueTimeslotISCPListLCR-IEs
UEMeasurementValueTimeslotISCPListLCR-IEs ::= SEQUENCE {
    timeSlotLCR
                                    TimeSlotLCR.
    dL-TimeslotISCP
                                    DL-TimeslotISCP,
                                    ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPListLCR-IEs-ExtIEs } }
   iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
UEMeasurementValueTimeslotISCPListLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UEMeasurementValueTimeslotISCPList768 ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTimeslotISCPList768-IEs
UEMeasurementValueTimeslotISCPList768-IEs ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    dL-TimeslotISCP
                                    DL-TimeslotISCP,
    iE-Extensions
                                    ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPList768-IEs-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
UEMeasurementValueTimeslotISCPList768-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UEMeasurementValue-Extension := ProtocolIE-Single-Container {{ UEMeasurementValue-ExtensionIE }}
UEMeasurementValue-ExtensionIE RNSAP-PROTOCOL-IES ::= {
    . . .
}
UEMeasurementValueInformation ::= CHOICE {
    measurementAvailable
                                UEMeasurementValueInformationAvailable,
    measurementnotAvailable
                                UEMeasurementValueInformationnotAvailable
}
UEMeasurementValueInformationAvailable::= SEOUENCE {
    uEmeasurementValue
                                UEMeasurementValue,
                                ProtocolExtensionContainer { { UEMeasurementValueInformationAvailableItem-ExtIEs} }
    ie-Extensions
                                                                                                                                  OPTIONAL,
    . . .
}
UEMeasurementValueInformationAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
}
UEMeasurementValueInformationnotAvailable ::= NULL
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
-- Third bit: RRC Rel-9 (onwards) handling of DL secondary HS-DSCH (de)activation state Support Indicator
-- Fourth bit: UE DTX/DRX related HS-SCCH orders uniform behavior indicator
-- Fifth bit: UE longer HARQ processing time for Multiflow and MIMO 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.
UE-State ::= CHOICE {
    cell-fach-pch
                                                                 Cell-Fach-Pch-State,
    ura-pch
                                                                 Ura-Pch-State,
    . . .
}
UE-transmission-power-headroom-Value ::= INTEGER (0..31)
Cell-Fach-Pch-State ::= SEQUENCE {
    d-RNTI
                                    D-RNTI,
    iE-Extensions
                                    ProtocolExtensionContainer { { Cell-Fach-Pch-State-ExtIEs } }
                                                                                                          OPTIONAL,
    . . .
Cell-Fach-Pch-State-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Ura-Pch-State ::= SEQUENCE {
    srnc-id
                                    RNC-ID,
    ura-id
                                    URA-ID,
    iE-Extensions
                                    ProtocolExtensionContainer { { Ura-Pch-State-ExtIEs} }
                                                                                                 OPTIONAL,
    . . .
Ura-Pch-State-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-Extended-SRNC-ID
                                                CRITICALITY reject EXTENSION Extended-RNC-ID
                                                                                                                          PRESENCE optional
                                                                                                                                                 },
    . . .
}
UL-Delta-T2TP ::= INTEGER (0..6,...)
UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
}
UL-DPDCHIndicatorEDCH ::= ENUMERATED {
    uL-DPDCH-present,
    uL-DPDCH-not-present }
```

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UL-Timeslot-Information::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem

```
UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot
                                    TimeSlot.
    midambleShiftAndBurstType
                                    MidambleShiftAndBurstType,
    tFCI-Presence
                                    TFCI-Presence,
    uL-Code-Information
                                    TDD-UL-Code-Information,
                                    ProtocolExtensionContainer { {UL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UL-Timeslot-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTsLCR)) OF UL-TimeslotLCR-InformationItem
UL-TimeslotLCR-InformationItem ::= SEQUENCE
                                             TimeSlotLCR,
    timeSlotLCR
    midambleShiftLCR
                                            MidambleShiftLCR,
    tFCI-Presence
                                            TFCI-Presence,
    uL-Code-LCR-InformationList
                                        TDD-UL-Code-LCR-Information,
                                             ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs } }
    iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
UL-TimeslotLCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-PLCCH-Information-UL-TimeslotLCR-Info CRITICALITY ignore
                                                                             EXTENSION PLCCHinformation
                                                                                                                   PRESENCE optional },
    . . .
PLCCHinformation ::= SEQUENCE {
    tDD-ChannelisationCode
                                             TDD-ChannelisationCode,
    timeSlotLCR
                                             TimeSlotLCR,
                                             MidambleShiftLCR,
    midambleShiftLCR
    sequenceNumber
                                             PLCCHsequenceNumber,
                                             ProtocolExtensionContainer { { PLCCHinformation-ExtIEs} }
    iE-Extensions
                                                                                                                           OPTIONAL,
    . . .
PLCCHinformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-Timeslot-Information768::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem768
UL-Timeslot-InformationItem768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot.
                                        MidambleShiftAndBurstType768,
    midambleShiftAndBurstType768
    tFCI-Presence
                                    TFCI-Presence,
    uL-Code-Information768
                                        TDD-UL-Code-Information768,
                                    ProtocolExtensionContainer { {UL-Timeslot-InformationItem768-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
```

```
UL-Timeslot-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-TimeSlot-ISCP-InfoItem
UL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
    timeSlot
                                TimeSlot,
    uL-TimeslotISCP
                                UL-TimeslotISCP,
                                ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
}
UL-TimeSlot-ISCP-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UL-TimeSlot-ISCP-LCR-Info ::= SEQUENCE (SIZE (1..maxNrOfULTsLCR)) OF UL-TimeSlot-ISCP-LCR-InfoItem
UL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
    timeSlotLCR
                                    TimeSlotLCR,
    iSCP
                                    UL-Timeslot-ISCP-Value,
                                    ProtocolExtensionContainer { { UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs } }
   iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-Timeslot-ISCP-Value ::= UL-TimeslotISCP
UL-Timeslot-ISCP-Value-IncrDecrThres ::= INTEGER(0..126)
-- Unit dB. Step 0.5dB
-- e.g. Value 100 means 50dB
UL-TimingAdvanceCtrl-LCR ::= SEQUENCE {
    sync-UL-codes-bitmap
                                                BIT STRING (SIZE(8)),
    fPACH-info
                                                FPACH-Information,
    prxUpPCHdes
                                                INTEGER (-120 .. -58, ...),
    syncUL-procParameter
                                                SYNC-UL-ProcParameters,
    mMax
                                                INTEGER (1..32),
    . . .
    }
Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2.
    higher-layer-scheduling,
    . . .
}
UL-SIR
                       ::= INTEGER (-82..173)
-- The UL-SIR gives the UL-SIR in number of 0.1 dB steps.
-- E.g. Value 173 means 17.3 dB
```

```
-- Unit dB. Step 0.1 dB.
UC-ID ::= SEQUENCE {
    rNC-ID
                        RNC-ID,
    c-ID
                        C-ID.
                             ProtocolExtensionContainer { {UC-ID-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
}
UC-ID-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-RNC-ID
                                CRITICALITY reject
                                                                      Extended-RNC-ID PRESENCE optional },
                                                         EXTENSION
    . . .
}
UL-DPCCH-SlotFormat
                             ::= INTEGER (0..5,...)
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 RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
}
UL-ScramblingCodeNumber
                                ::= INTEGER (0..16777215)
UL-Synchronisation-Parameters-LCR ::= SEQUENCE {
    uL-Synchronisation-StepSize
                                         UL-Synchronisation-StepSize,
    uL-Synchronisation-Frequency
                                             UL-Synchronisation-Frequency,
                                     ProtocolExtensionContainer { { UL-Synchronisation-Parameters-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                            OPTIONAL,
    . . .
}
UL-Synchronisation-Parameters-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
```

```
UL-Synchronisation-StepSize ::= INTEGER (1..8)
UL-Synchronisation-Frequency ::= INTEGER (1..8)
UL-TimeslotISCP
                       ::= INTEGER (0..127)
-- According to mapping in TS 25.225 [14]
UPPCHPositionLCR ::= INTEGER (0..127)
UpPTSInterferenceValue ::= INTEGER (0..127,...)
Unidirectional-DCH-Indicator := ENUMERATED {
    downlink-DCH-only,
    uplink-DCH-only
}
URA-ID
                       ::= INTEGER (0..65535)
URA-Information ::= SEQUENCE {
    uRA-ID
                                        URA-ID,
    multipleURAsIndicator
                                        MultipleURAsIndicator,
    rNCsWithCellsInTheAccessedURA-List RNCsWithCellsInTheAccessedURA-List OPTIONAL,
                                        ProtocolExtensionContainer { {URA-Information-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
}
URA-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-RNC-ID
                                                                                                                 PRESENCE optional },
                                                CRITICALITY reject EXTENSION Extended-RNC-ID
    . . .
}
RNCsWithCellsInTheAccessedURA-List ::= SEQUENCE (SIZE (1..maxRNCinURA-1)) OF RNCsWithCellsInTheAccessedURA-Item
RNCsWithCellsInTheAccessedURA-Item ::= SEOUENCE {
    rNC-ID
                                    RNC-ID,
    iE-Extensions
                                    ProtocolExtensionContainer { {RNCsWithCellsInTheAccessedURA-Item-ExtIEs} } OPTIONAL,
RNCsWithCellsInTheAccessedURA-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
USCH-ID
                       ::= INTEGER (0..255)
USCH-Information ::= SEQUENCE (SIZE (1..maxNoOfUSCHs)) OF USCH-InformationItem
USCH-InformationItem ::= SEQUENCE {
    uSCH-ID
                                        USCH-ID,
    ul-CCTrCH-ID
                                        CCTrCH-ID,
    trChSourceStatisticsDescriptor
                                        TrCH-SrcStatisticsDescr,
    transportFormatSet
                                        TransportFormatSet,
                                        AllocationRetentionPriority,
    allocationRetentionPriority
```

```
1105
```

```
schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    rb-Info
                                        RB-Info.
    iE-Extensions
                                        ProtocolExtensionContainer { {USCH-InformationItem-ExtIEs } } OPTIONAL,
    . . .
USCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-TrafficClass
                                            CRITICALITY ignore EXTENSION TrafficClass
                                                                                                   PRESENCE mandatory }
    { ID id-BindingID
                                            CRITICALITY ignore EXTENSION BindingID
                                                                                                   PRESENCE optional } |
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress
                                                                                                 PRESENCE optional}|
                                            CRITICALITY ignore EXTENSION TransportLayerAddress
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlOos
                                            CRITICALITY ignore EXTENSION ThlQos
                                                                                                   PRESENCE optional },
    . . .
Usefulness-Of-Battery-Optimization ::= ENUMERATED {can-benefit, cannot-benefit}
User-Plane-Congestion-Fields-Inclusion
                                         ::= ENUMERATED { shall-be-included
Uu-ActivationState ::= ENUMERATED {
    activated.
    de-activated,
    . . .
UMTS-Cells-Info-List := SEOUENCE (SIZE (0..maxNrOfCells)) OF ProtocolIE-Single-Container { {UMTS-Cells-Info-IEs} }
UMTS-Cells-Info-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UMTS-Cells-Info CRITICALITY ignore TYPE UMTS-Cell-Info
                                                                         PRESENCE optional }
UMTS-Cell-Info ::= SEQUENCE{
    C-TD
                                        C-ID,
                                        ProtocolExtensionContainer { { UMTS-Cell-Info-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
}
UMTS-Cell-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UL-CLTD-Information ::= SEQUENCE {
    sDPCCH-PowerOffsetInformation
                                        SDPCCH-PowerOffsetInformation,
    c-ID
                                        C-ID
                                                                         OPTIONAL.
-- The IE shall be present only if there is no serving E-DCH RL or HS-DSCH RL configuration in the concerned UE Context.
    uL-CLTD-Activation-Information
                                        UL-CLTD-Activation-Information OPTIONAL,
                                            ProtocolExtensionContainer { { UL-CLTD-Info-ExtIEs } }
    iE-Extensions
                                                                                                                  OPTIONAL,
    . . .
}
UL-CLTD-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
UL-CLTD-Information-Reconf
                                 ::=SEOUENCE{
    setup-Or-ConfigurationChange-Or-Removal-Of-UL-CLTD
                                                                      Setup-Or-ConfigurationChange-Or-Removal-Of-UL-CLTD,
    iE-Extensions
                                                                      ProtocolExtensionContainer { { UL-CLTD-Information-Reconf-ExtIEs } } OPTIONAL,
    . . .
}
UL-CLTD-Information-Reconf-ExtIEs
                                     RNSAP-PROTOCOL-EXTENSION ::=
    . . .
UL-CLTD-Information-To-Modify ::= SEQUENCE {
    sDPCCH-PowerOffsetInformation
                                         SDPCCH-PowerOffsetInformation
                                                                                       OPTIONAL,
    c-ID
                                         C-ID
                                                                                       OPTIONAL,
    uL-CLTD-Activation-Information
                                         UL-CLTD-Activation-Information
                                                                                       OPTIONAL,
                                             ProtocolExtensionContainer { { UL-CLTD-Information-To-Modify-ExtIEs } }
    iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
UL-CLTD-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-CLTD-Information-Removal ::= ENUMERATED {
    remove,
    . . .
3
UL-CLTD-State-Update-Information ::= ENUMERATED {
    activate,
    de-activate,
    . . .
}
UL-CLTD-Activation-Information ::= ENUMERATED {
    activated.
    de-activated,
UL-MIMO-Information ::= SEQUENCE {
    e-roch-power-offset
                                 E-ROCH-PowerOffset
                                                                  OPTIONAL,
    s-e-dpcch-power-offset
                                 S-E-DPCCH-PowerOffset,
                                 InterStream-Interference-Compensation,
    interstream-compensation
    minimum-E-TFCI-rank2
                                 INTEGER(0..127),
                                 ProtocolExtensionContainer { { UL-MIMO-Information-ExtlEs } } OPTIONAL,
    iE-Extensions
    . . .
}
UL-MIMO-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UL-MIMO-Information-To-Modify ::= SEQUENCE {
```

```
e-roch-power-offset
                             E-ROCH-PowerOffset
                                                                  OPTIONAL,
   s-e-dpcch-power-offset
                             S-E-DPCCH-PowerOffset
                                                                  OPTIONAL,
   interstream-compensation
                             InterStream-Interference-Compensation
                                                                  OPTIONAL,
   minimum-E-TFCI-rank2
                             INTEGER(0..127)
                                                                  OPTIONAL,
   iE-Extensions
                             ProtocolExtensionContainer { { UL-MIMO-Information-To-Modify-ExtIEs } } OPTIONAL,
    . . .
UL-MIMO-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
}
UL-MIMO-Reconfiguration ::= CHOICE {
   setup
                         UL-MIMO-Information,
   configurationChange
                         UL-MIMO-Information-To-Modify,
                         UL-MIMO-Removal
   removal
}
UL-MIMO-Removal ::= ENUMERATED {
   remove,
    . . .
UL-MIMO-DL-Control-Channel-Information ::= SEQUENCE {
   e-roch-channelization-code
                                 FDD-DL-ChannelisationCodeNumber,
   s-e-rnti
                                 E-RNTI,
                                 ERGCH-SignatureSequence,
   s-signature-sequence
   s-e-roch-release-indicator
                                 S-E-ROCH-Release-Indicator
                                                                  OPTIONAL,
                                 ProtocolExtensionContainer { { UL-MIMO-DL-Control-Channel-Information-ExtIEs } } OPTIONAL,
   iE-Extensions
    . . .
}
UL-MIMO-DL-Control-Channel-Information-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
-- V
-- W
-- X
-- Y
-- Z
END
          Common Definitions
9.3.5
     - -
_ _
  Common definitions
_ _
- -
RNSAP-CommonDataTypes {
```

itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-CommonDataTypes (3) }

DEFINITIONS AUTOMATIC TAGS ::=

#### BEGIN

-- Extension constants - -maxPrivateIEs INTEGER ::= 65535 maxProtocolExtensions INTEGER ::= 65535 maxProtocolIEs INTEGER ::= 65535 - --- Common Data Types - -Criticality ::= ENUMERATED { reject, ignore, notify } Presence ::= ENUMERATED { optional, conditional, mandatory } PrivateIE-ID ::= CHOICE { local INTEGER (0.. maxPrivateIEs), OBJECT IDENTIFIER global } ProcedureCode ::= INTEGER (0..255) ProcedureID ::= SEOUENCE { procedureCode ProcedureCode, ddMode ENUMERATED { tdd, fdd, common, ... } } ProtocolIE-ID ::= INTEGER (0..maxProtocolIEs) TransactionID ::= CHOICE { shortTransActionId INTEGER (0..127), longTransActionId INTEGER (0...32767) } TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessful-outcome, outcome } END

# 9.3.6 Constant Definitions

-- Constant definitions RNSAP-Constants { itu-t (0) identified-organization (4) etsi (0) mobileDomain (0) umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-Constants (4) } DEFINITIONS AUTOMATIC TAGS ::= BEGIN IMPORTS ProcedureCode, ProtocolIE-ID FROM RNSAP-CommonDataTypes; \*\*\*\*\* - --- Elementary Procedures - -\*\*\*\*\*\*\*\*\*\* id-commonTransportChannelResourcesInitialisation ProcedureCode ::= 0 id-commonTransportChannelResourcesRelease ProcedureCode ::= 1id-compressedModeCommand ProcedureCode ::= 2 ProcedureCode ::= 3id-downlinkPowerControl ProcedureCode ::= 4 id-downlinkPowerTimeslotControl id-downlinkSignallingTransfer ProcedureCode ::= 5id-errorIndication ProcedureCode ::= 6id-dedicatedMeasurementFailure ProcedureCode ::= 7 id-dedicatedMeasurementInitiation ProcedureCode ::= 8 id-dedicatedMeasurementReporting ProcedureCode ::= 9 id-dedicatedMeasurementTermination ProcedureCode ::= 10 ProcedureCode ::= 11 id-paging id-physicalChannelReconfiguration ProcedureCode ::= 12 id-privateMessage ProcedureCode ::= 13 id-radioLinkAddition ProcedureCode ::= 14 id-radioLinkCongestion ProcedureCode ::= 34 id-radioLinkDeletion ProcedureCode ::= 15 ProcedureCode ::= 16id-radioLinkFailure id-radioLinkPreemption ProcedureCode ::= 17 id-radioLinkRestoration ProcedureCode : = 18id-radioLinkSetup ProcedureCode ::= 19 id-relocationCommit ProcedureCode ::= 20 id-synchronisedRadioLinkReconfigurationCancellation ProcedureCode ::= 21 id-synchronisedRadioLinkReconfigurationCommit ProcedureCode ::= 22 id-synchronisedRadioLinkReconfigurationPreparation ProcedureCode ::= 23 id-unSynchronisedRadioLinkReconfiguration ProcedureCode ::= 24 id-uplinkSignallingTransfer ProcedureCode ::= 25 id-commonMeasurementFailure ProcedureCode ::= 26 id-commonMeasurementInitiation ProcedureCode ::= 27id-commonMeasurementReporting ProcedureCode ::= 28

id-commonMeasurementTermination		ProcedureCode ::= 29
id-informationExchangeFailure		ProcedureCode ::= 30
id-informationExchangeInitiation		ProcedureCode ::= 31
id-informationReporting		ProcedureCode ::= 32
id-informationExchangeTermination		ProcedureCode ::= 33
id-reset		ProcedureCode ::= 35
id-radioLinkActivation		ProcedureCode ::= 36
		ProcedureCode ::= 37
id-gERANuplinkSignallingTransfer		
id-radioLinkParameterUpdate		ProcedureCode ::= 38
id-uEMeasurementFailure		ProcedureCode ::= 39
id-uEMeasurementInitiation		ProcedureCode ::= 40
id-uEMeasurementReporting		ProcedureCode ::= 41
id-uEMeasurementTermination		ProcedureCode ::= 42
id-iurDeactivateTrace		ProcedureCode ::= 43
id-iurInvokeTrace		ProcedureCode ::= 44
id-mBMSAttach		ProcedureCode ::= 45
id-mBMSDetach		ProcedureCode ::= 46
id-directInformationTransfer		ProcedureCode ::= 48
id-enhancedRelocation		ProcedureCode ::= 49
id-enhancedRelocationCancel		ProcedureCode ::= 50
id-enhancedRelocationSignallingTransfer	<u>^</u>	ProcedureCode ::= 51
id-enhancedRelocationRelease		ProcedureCode ::= 52
id-mBSFNMCCHInformation		ProcedureCode ::= 52 ProcedureCode ::= 53
id-secondaryULFrequencyReporting		ProcedureCode ::= 54
id-secondaryULFrequencyUpdate		ProcedureCode ::= 55
id-informationTransferControl		ProcedureCode ::= 56
id-enhancedRelocationResourceAllocation	1	ProcedureCode ::= 60
id-enhancedRelocationResourceRelease		ProcedureCode ::= 61
************************************	* * * * * * * * * * * * * * * * * * * *	* * * * *
Lists		
*********	*****	* * * * *
maxCellSIB110rSIB12	INTEGER ::= 32	
maxCellsMeas	INTEGER ::= 8	
	INTEGER ::= 0	
maxRateMatching		
maxNoOfDSCHs	INTEGER ::= 10	
maxNoOfDSCHsLCR	INTEGER ::= 10	
maxNoOfRB	INTEGER ::= 32	
maxNoOfUSCHs	INTEGER ::= 10	
maxNoOfUSCHsLCR	INTEGER ::= 10	
maxNrOfTFCs	INTEGER ::= 1024	
maxNrOfTFs	INTEGER ::= 32	
maxNrOfCCTrCHs	INTEGER ::= 16	
maxNrOfCCTrCHsLCR	INTEGER ::= 16	
maxNrOfDCHs	INTEGER ::= 128	
maxNrOfDL-Codes	INTEGER :: $= 8$	
maxNrOfDPCHs	INTEGER ::= 240	
maxNrOfDPCHsPerRL-1		naxNrofCCTrCH*maxNrOfULTs-1
	INTEGER ::= 239 0 INTEGER ::= 240	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
maxNrOfDPCHsLCR		
maxNrOfDPCHsLCRPerRL-1		
N. O CODOTL E CO		naxNrofCCTrCH*maxNrOfULTsLCR-1
maxNrOfDPCHs768	INTEGER ::= 95 n INTEGER ::= 480	naxNrofCCTrCH*maxNrOfULTsLCR-1

N-OFDOU-DCODDI 1	
maxNrOfDPCHs768PerRL-1	INTEGER ::= 479
maxNrOfErrors	INTEGER ::= 256
maxNrOfMACcshSDU-Length	INTEGER ::= 16
maxNrOfMBMSServices	INTEGER ::= 128
maxNrOfActiveMBMSServices	INTEGER ::= 256
maxNrOfPoints	INTEGER ::= 15
maxNrOfRLs	INTEGER ::= 16
maxNrOfRLSets	INTEGER ::= maxNrOfRLs
maxNrOfRLSets-1	INTEGER ::= 15 maxNrOfRLSets - 1
maxNrOfRLs-1	INTEGER ::= 15 maxNrOfRLs - 1
maxNrOfRLs-2	INTEGER ::= 14 maxNrOfRLs - 2
maxNrOfUEs	INTEGER ::= 4096
maxNrOfULTs	INTEGER ::= 15
maxNrOfULTsLCR	INTEGER ::= 6
maxNrOfDLTs	INTEGER ::= 15
maxNrOfDLTsLCR	INTEGER ::= 6
maxNCinURA-1	INTEGER ::= 15
maxTTI-Count	INTEGER ::= 4
maxCTFC	INTEGER ::= 16777215
maxNrOfNeighbouringRNCs	INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC	INTEGER ::= 256
maxNrOfGSMNeighboursPerRNC	INTEGER ::= 256
maxNrOfTDDNeighboursPerRNC	INTEGER ::= 256
maxNrOfFACHs	INTEGER ::= 8
maxNrOfLCRTDDNeighboursPerRNC	INTEGER ::= 256
maxIBSEG	INTEGER ::= 16
maxNrOfSCCPCHs	INTEGER ::= 8
maxNrOfSCCPCHs768	INTEGER ::= 16
maxTGPS	INTEGER ::= 6
maxNrOfTS	INTEGER ::= 15
maxNrOfLevels	INTEGER ::= 256
maxNrOfTsLCR	INTEGER ::= 6
maxNoSat	INTEGER ::= 16
maxNoGPSTypes	INTEGER ::= 8
maxNrOfMeasNCell	INTEGER ::= 96
maxNrOfMeasNCell-1	INTEGER ::= 95 maxNrOfMeasNCell - 1
maxResetContext	INTEGER ::= 250
maxResetContextGroup	INTEGER ::= 32
maxNrOfHARQProc	INTEGER ::= 8
maxNrOfHSSCCHCodes	INTEGER ::= 4
maxNrOfHSSICHs	INTEGER ::= 4
maxNrOfHSSICHs-1	INTEGER ::= 3
maxNrOfMACdFlows	INTEGER ::= 8
maxNrOfMACdFlows-1	INTEGER ::= 7 maxNrOfMACdFlows - 1
maxNrOfMACdPDUSize	INTEGER ::= 32
maxNrOfPDUIndexes	INTEGER ::= 8
maxNrOfPDUIndexes-1	INTEGER ::= 7 maxNrOfPDUIndexes - 1
maxNrOfPrioQueues	INTEGER ::= 8
maxNrOfPrioQueues-1	INTEGER ::= 7 maxNrOfPrioQueues - 1
maxNrOfSNAs	INTEGER ::= 65536
maxNrOfSatAlmanac-maxNoSat	INTEGER ::= 16
maxNrOfGERANSI	INTEGER ::= 8
maxNrOfInterfaces	INTEGER ::= 16
maxNrofSigSeqERGHICH-1	INTEGER ::= 39
	1.1202A 55

**ETSI** 

N 050 33	
maxNrOfCells	INTEGER ::= 65536
maxNrOfAddFreq	INTEGER ::= 8
maxNrOfCellsPerFreq	INTEGER ::= 65536
maxNrOfEDCHMACdFlows-1	INTEGER ::= 7
maxNrOfEDCH-HARQ-PO-QUANTSTEPs	INTEGER ::= 6
maxNrOfEDPCCH-PO-QUANTSTEPs	INTEGER ::= 8
maxNrOfEDCHHARQProcesses2msEDCH	INTEGER ::= 8
maxNrOfBits-MACe-PDU-non-scheduled	INTEGER ::= 19982
maxNrOfRefETFCIs	INTEGER ::= 8
maxNrOfRefETFCI-PO-QUANTSTEPs	INTEGER ::= 29
maxNrOfEDCHMACdFlows	INTEGER ::= 8
maxNoOfLogicalChannels	INTEGER ::= 16 only maximum 15 can be used
maxNrOfRefBetas	INTEGER ::= 8
maxNrOfEAGCHCodes	INTEGER ::= 4
maxNrOfHS-DSCHTBSs	INTEGER ::= 90
maxNrOfHS-DSCHTBSs-HS-SCCHless	INTEGER ::= 4
maxHS-PDSCHCodeNrComp-1	INTEGER ::= 15
maxNrOfEHICHCodes	INTEGER ::= 4
maxGANSSSat	INTEGER ::= 64
maxNoGANSS	INTEGER ::= 8
maxSqnType	INTEGER ::= 8
maxNrOfBroadcastPLMNs	INTEGER ::= 5
maxHSDPAFrequency	INTEGER ::= 8
maxHSDPAFrequency-1	INTEGER ::= 7
maxFrequencyinCell	INTEGER ::= 12
maxFrequencyinCell-1	INTEGER ::= 11
maxGANSSSatAlmanac	INTEGER ::= 36
maxGANSSClockMod	INTEGER ::= 4
maxNrOfEDCHRLs	INTEGER := 4
maxEARFCN	INTEGER ::= 65535
maxNrOfEUTRANeighboursPerRNC	INTEGER ::= 256
maxNrOfMCCHMessages	INTEGER ::= 5
maxNrOfMBMSL3	INTEGER ::= 64
maxNrOfEDCHMACdFlowsLCR	INTEGER ::= 256
maxNrOfEDCHMACdFlowsLCR-1	INTEGER ::= 255
maxNrOfPreconfiguredNeighbours	INTEGER ::= 256
maxNrOfHSDSCH-1	INTEGER ::= 32
maxNrOfHSDSCH	INTEGER ::= 33
maxGANSS-1	INTEGER ::= 7
maxlengthMBMSconcatservlists	INTEGER ::= 96
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 ::= 4 INTEGER ::= 3
maxNoOf-HS-SICH-SPS	INTEGER ::= 4
maxNoOf-HS-SICH-SPS-1	INTEGER ::= 3
maxNoOI-HS-SICH-SPS-I maxNoOfNon-HS-SCCH-Assosiated-HS-SICH	INIEGER ::= 3 INTEGER ::= 4
maxNoOINON-HS-SCCH-ASSOSIALED-HS-SICH maxNrOfEDCH-1	INTEGER ::= 4 INTEGER ::= 32
maxNrOfEDCH-1 maxNrOfDCHMeasurementOccasionPatternSec	
maxNrOfULCarriersLCR-1	INTEGER ::= 5
maxNrOfCellIds	INTEGER ::= 5 INTEGER ::= 32
maxNrOfRAIs	INTEGER ::= 52 INTEGER ::= 8
maxNrOIRAIS maxNrOfLAIs	INIEGER ::= 8 INTEGER ::= 8
IIIGAIUT OT LIAT 5	TINI DODK= 0

<pre>maxNrOfExtendedNeighbouringRNCs maxNrOfGsmCell maxNrOfANRCells maxFreqBandsTDD maxSCPICHCell maxSCPICHCell-1 maxNoOfCommonRGCells</pre>	INTEGER ::= 64 INTEGER ::= 128 INTEGER ::= 256 INTEGER ::= 16 INTEGER ::= 32 INTEGER ::= 31 INTEGER ::= 256	
***********************************	******	
IEs		
************************************	******	
<pre>id-AllowedQueuingTime id-Allowed-Rate-Information id-AntennaColocationIndicator id-BindingID id-C-ID id-C-ID id-C-RNTI id-Cell-Capacity-Class-Value id-CFN id-CN-CS-DomainIdentifier id-CN-PS-DomainIdentifier id-Cause id-CoverageIndicator id-CriticalityDiagnostics id-ContextInfoItem-Reset id-ContextGroupInfoItem-Reset id-D-RNTI id-D-RNTI-ReleaseIndication id-DCHs-to-Add-FDD id-DCHs-to-Add-FDD id-DCH-DeleteList-RL-ReconfPrepFDD id-DCH-DeleteList-RL-ReconfPrepTDD id-DCH-DeleteList-RL-ReconfRgstFDD id-DCH-DeleteList-RL-ReconfRgstFDD id-DCH-DeleteList-RL-ReconfRgstFDD id-DCH-DD-Information id-DCH-TDD-Information id-CH-TDD-Information id-DCH-Information id-DCH-InformationItem-RL-Conges id-DL-CCTrCH-InformationListIE-RL-Rec id-DL-CCTrCH-InformationListIE-RL-Rec id-DL-CCTrCH-InformationItem-RL-Setup id-DL-CCTrCH-InformationItem-RL-Setup id-DL-CCTrCH-InformationListIE-RL-Add</pre>	confPrepTDD confReadyTDD p-ReconfRqstTDD PRqstTDD ReconfRqstTDD litionRspTDD	
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD		
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD id-DL-CCTrCH-InformationList-RL-SetupRqstTDD		
id-FDD-DL-CodeInformation		

ProtocolIE-ID ::= 4 ProtocolIE-ID ::= 42 ProtocolIE-ID ::= 309 ProtocolIE-ID ::= 5 ProtocolIE-ID ::= 6 ProtocolIE-ID ::= 7 ProtocolIE-ID ::= 303 ProtocolIE-ID ::= 8 ProtocolIE-ID ::= 9 ProtocolIE-ID ::= 10 ProtocolIE-ID ::= 11 ProtocolIE-ID ::= 310 ProtocolIE-ID ::= 20 ProtocolIE-ID ::= 211 ProtocolIE-ID ::= 515 ProtocolIE-ID ::= 21 ProtocolIE-ID ::= 22 ProtocolIE-ID ::= 26 ProtocolIE-ID ::= 27 ProtocolIE-ID ::= 30 ProtocolIE-ID ::= 31 ProtocolIE-ID ::= 32 ProtocolIE-ID ::= 33 ProtocolIE-ID ::= 34 ProtocolIE-ID ::= 35 ProtocolIE-ID ::= 39 ProtocolIE-ID ::= 40 ProtocolIE-ID ::= 43 ProtocolIE-ID ::= 38 ProtocolIE-ID ::= 44 ProtocolIE-ID ::= 45 ProtocolIE-ID ::= 46 ProtocolIE-ID ::= 47 ProtocolIE-ID ::= 48 ProtocolIE-ID ::= 49 ProtocolIE-ID ::= 50 ProtocolIE-ID ::= 51 ProtocolIE-ID ::= 52 ProtocolIE-ID ::= 53

ProtocolIE-ID ::= 54

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id-DL-DPCH-Information-RL-ReconfPrepFDD id-DL-DPCH-Information-RL-SetupRostFDD id-DL-DPCH-Information-RL-ReconfRostFDD id-DL-DPCH-InformationItem-PhyChReconfRgstTDD id-DL-DPCH-InformationItem-RL-AdditionRspTDD id-DL-DPCH-InformationItem-RL-SetupRspTDD id-DL-DPCH-TimingAdjustment id-DLReferencePower id-DLReferencePowerList-DL-PC-Rgst id-DL-ReferencePowerInformation-DL-PC-Rost id-DPC-Mode id-DRXCycleLengthCoefficient id-DedicatedMeasurementObjectType-DM-Fail-Ind id-DedicatedMeasurementObjectType-DM-Fail id-DedicatedMeasurementObjectType-DM-Rprt id-DedicatedMeasurementObjectType-DM-Rgst id-DedicatedMeasurementObjectType-DM-Rsp id-DedicatedMeasurementType id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD id-Guaranteed-Rate-Information id-TMST id-HCS-Prio id-L3-Information id-AdjustmentPeriod id-MaxAdjustmentStep id-MeasurementFilterCoefficient id-MessageStructure id-MeasurementID id-Neighbouring-GSM-CellInformation id-Neighbouring-UMTS-CellInformationItem id-NRT-Load-Information-Value id-NRT-Load-Information-Value-IncrDecrThres id-PagingArea-PagingRgst id-FACH-FlowControlInformation id-PartialReportingIndicator id-Permanent-NAS-UE-Identity id-PowerAdjustmentType id-RANAP-RelocationInformation id-RL-Information-PhyChReconfRgstFDD id-RL-Information-PhyChReconfRgstTDD id-RL-Information-RL-AdditionRgstFDD id-RL-Information-RL-AdditionRgstTDD id-RL-Information-RL-DeletionRgst id-RL-Information-RL-FailureInd id-RL-Information-RL-ReconfPrepFDD id-RL-Information-RL-RestoreInd id-RL-Information-RL-SetupRgstFDD id-RL-Information-RL-SetupRgstTDD id-RL-InformationItem-RL-CongestInd id-RL-InformationItem-DM-Rprt id-RL-InformationItem-DM-Rgst id-RL-InformationItem-DM-Rsp id-RL-InformationItem-RL-PreemptRequiredInd

ProtocolIE-ID ::= 59 ProtocolIE-ID ::= 60 ProtocolIE-ID ::= 61 ProtocolIE-ID ::= 62 ProtocolIE-ID ::= 63 ProtocolIE-ID ::= 64 ProtocolIE-ID ::= 278 ProtocolIE-ID ::= 67 ProtocolIE-ID ::= 68 ProtocolIE-ID ::= 69 ProtocolIE-ID ::= 12 ProtocolIE-ID ::= 70 ProtocolIE-ID ::= 470 ProtocolIE-ID ::= 471 ProtocolIE-ID ::= 71 ProtocolIE-ID ::= 72 ProtocolIE-ID ::= 73 ProtocolIE-ID ::= 74 ProtocolIE-ID ::= 82 ProtocolIE-ID ::= 83 ProtocolIE-ID ::= 41 ProtocolIE-ID ::= 84 ProtocolIE-ID ::= 311 ProtocolIE-ID ::= 85 ProtocolIE-ID ::= 90 ProtocolIE-ID ::= 91 ProtocolIE-ID ::= 92 ProtocolIE-ID ::= 57 ProtocolIE-ID ::= 93 ProtocolIE-ID ::= 13 ProtocolIE-ID ::= 95 ProtocolIE-ID ::= 305 ProtocolIE-ID ::= 306 ProtocolIE-ID ::= 102 ProtocolIE-ID ::= 103 ProtocolIE-ID ::= 472 ProtocolIE-ID ::= 17 ProtocolIE-ID ::= 107 ProtocolIE-ID ::= 109 ProtocolIE-ID ::= 110 ProtocolIE-ID ::= 111 ProtocolIE-ID ::= 112 ProtocolIE-ID ::= 113 ProtocolIE-ID ::= 114 ProtocolIE-ID ::= 115 ProtocolIE-ID ::= 116 ProtocolIE-ID ::= 117 ProtocolIE-ID ::= 118 ProtocolIE-ID ::= 119 ProtocolIE-ID ::= 55 ProtocolIE-ID ::= 120 ProtocolIE-ID ::= 121 ProtocolIE-ID ::= 122 ProtocolIE-ID ::= 2

id-RL-InformationItem-RL-SetupRqstFDD id-RL-InformationList-RL-CongestInd id-RL-InformationList-RL-AdditionRgstFDD id-RL-InformationList-RL-DeletionRgst id-RL-InformationList-RL-PreemptRequiredInd id-RL-InformationList-RL-ReconfPrepFDD id-RL-InformationResponse-RL-AdditionRspTDD id-RL-InformationResponse-RL-ReconfReadvTDD id-RL-InformationResponse-RL-SetupRspTDD id-RL-InformationResponseItem-RL-AdditionRspFDD id-RL-InformationResponseItem-RL-ReconfReadyFDD id-RL-InformationResponseItem-RL-ReconfRspFDD id-RL-InformationResponseItem-RL-SetupRspFDD id-RL-InformationResponseList-RL-AdditionRspFDD id-RL-InformationResponseList-RL-ReconfReadyFDD id-RL-InformationResponseList-RL-ReconfRspFDD id-RL-InformationResponse-RL-ReconfRspTDD id-RL-InformationResponseList-RL-SetupRspFDD id-RL-ReconfigurationFailure-RL-ReconfFail id-RL-Set-InformationItem-DM-Rprt id-RL-Set-InformationItem-DM-Rost id-RL-Set-InformationItem-DM-Rsp id-RL-Set-Information-RL-FailureInd id-RL-Set-Information-RL-RestoreInd id-RL-Set-Successful-InformationItem-DM-Fail id-RL-Set-Unsuccessful-InformationItem-DM-Fail id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind id-RL-Successful-InformationItem-DM-Fail id-RL-Unsuccessful-InformationItem-DM-Fail id-RL-Unsuccessful-InformationItem-DM-Fail-Ind id-ReportCharacteristics id-Reporting-Object-RL-FailureInd id-Reporting-Object-RL-RestoreInd id-RT-Load-Value id-RT-Load-Value-IncrDecrThres id-S-RNTT id-ResetIndicator id-RNC-ID id-SAI id-SRNC-ID id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD id-TransportBearerID id-TransportBearerRequestIndicator id-TransportLaverAddress id-TvpeOfError id-UC-ID id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD id-UL-CCTrCH-InformationItem-RL-SetupRgstTDD id-UL-CCTrCH-InformationList-RL-SetupRgstTDD id-UL-CCTrCH-InformationListIE-PhyChReconfRgstTDD id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD

ProtocolIE-ID ::= 123 ProtocolIE-ID ::= 56 ProtocolIE-ID ::= 124 ProtocolIE-ID ::= 125 ProtocolIE-ID ::= 1 ProtocolIE-ID ::= 126 ProtocolIE-ID ::= 127 ProtocolIE-ID ::= 128 ProtocolIE-ID ::= 129 ProtocolIE-ID ::= 130 ProtocolIE-ID ::= 131 ProtocolIE-ID ::= 132 ProtocolIE-ID ::= 133 ProtocolIE-ID ::= 134 ProtocolIE-ID ::= 135 ProtocolIE-ID ::= 136 ProtocolIE-ID ::= 28 ProtocolIE-ID ::= 137 ProtocolIE-ID ::= 141 ProtocolIE-ID ::= 143 ProtocolIE-ID ::= 144 ProtocolIE-ID ::= 145 ProtocolIE-ID ::= 146 ProtocolIE-ID ::= 147 ProtocolIE-ID ::= 473 ProtocolIE-ID ::= 474 ProtocolIE-ID ::= 475 ProtocolIE-ID ::= 476 ProtocolIE-ID ::= 477 ProtocolIE-ID ::= 478 ProtocolIE-ID ::= 152 ProtocolIE-ID ::= 153 ProtocolIE-ID ::= 154 ProtocolIE-ID ::= 307 ProtocolIE-ID ::= 308 ProtocolIE-ID ::= 155 ProtocolIE-ID ::= 244 ProtocolIE-ID ::= 245 ProtocolIE-ID ::= 156 ProtocolIE-ID ::= 157 ProtocolIE-ID ::= 159 ProtocolIE-ID ::= 160 ProtocolIE-ID ::= 163 ProtocolIE-ID ::= 164 ProtocolIE-ID ::= 165 ProtocolIE-ID ::= 140 ProtocolIE-ID ::= 166 ProtocolIE-ID ::= 167 ProtocolIE-ID ::= 169 ProtocolIE-ID ::= 171 ProtocolIE-ID ::= 172 ProtocolIE-ID ::= 173 ProtocolIE-ID ::= 174 ProtocolIE-ID ::= 175

id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD id-UL-DPCH-Information-RL-ReconfPrepFDD id-UL-DPCH-Information-RL-ReconfRostFDD id-UL-DPCH-Information-RL-SetupRgstFDD id-UL-DPCH-InformationItem-PhyChReconfRgstTDD id-UL-DPCH-InformationItem-RL-AdditionRspTDD id-UL-DPCH-InformationItem-RL-SetupRspTDD id-UL-DPCH-InformationAddListIE-RL-ReconfReadvTDD id-UL-SIRTarget id-URA-Information id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD id-Active-Pattern-Sequence-Information id-AdjustmentRatio id-CauseLevel-RL-AdditionFailureFDD id-CauseLevel-RL-AdditionFailureTDD id-CauseLevel-RL-ReconfFailure id-CauseLevel-RL-SetupFailureFDD id-CauseLevel-RL-SetupFailureTDD id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD id-DL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD id-DSCHs-to-Add-TDD id-Unused-ProtocolIE-ID-216 id-DSCH-DeleteList-RL-ReconfPrepTDD id-Unused-ProtocolIE-ID-218 id-Unused-ProtocolIE-ID-219 id-DSCH-InformationListIE-RL-AdditionRspTDD id-DSCH-InformationListIEs-RL-SetupRspTDD id-DSCH-TDD-Information id-Unused-ProtocolIE-ID-223 id-Unused-ProtocolIE-ID-226 id-DSCH-ModifyList-RL-ReconfPrepTDD id-Unused-ProtocolIE-ID-228 id-Unused-ProtocolIE-ID-324 id-Unused-ProtocolIE-ID-229 id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD id-Unused-ProtocolIE-ID-29 id-Unused-ProtocolIE-ID-225 id-GA-Cell id-GA-CellAdditionalShapes id-Unused-ProtocolIE-ID-246 id-Transmission-Gap-Pattern-Sequence-Information id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD

ProtocolIE-ID ::= 176 ProtocolIE-ID ::= 177 ProtocolIE-ID ::= 178 ProtocolIE-ID ::= 179 ProtocolIE-ID ::= 180 ProtocolIE-ID ::= 181 ProtocolIE-ID ::= 182 ProtocolIE-ID ::= 183 ProtocolIE-ID ::= 184 ProtocolIE-ID ::= 185 ProtocolIE-ID ::= 188 ProtocolIE-ID ::= 189 ProtocolIE-ID ::= 190 ProtocolIE-ID ::= 193 ProtocolIE-ID ::= 194 ProtocolIE-ID ::= 197 ProtocolIE-ID ::= 198 ProtocolIE-ID ::= 199 ProtocolIE-ID ::= 200 ProtocolIE-ID ::= 201 ProtocolIE-ID ::= 205 ProtocolIE-ID ::= 206 ProtocolIE-ID ::= 207 ProtocolIE-ID ::= 208 ProtocolIE-ID ::= 209 ProtocolIE-ID ::= 210 ProtocolIE-ID ::= 212 ProtocolIE-ID ::= 213 ProtocolIE-ID ::= 214 ProtocolIE-ID ::= 215 ProtocolIE-ID ::= 216 ProtocolIE-ID ::= 217 ProtocolIE-ID ::= 218 ProtocolIE-ID ::= 219 ProtocolIE-ID ::= 220 ProtocolIE-ID ::= 221 ProtocolIE-ID ::= 222 ProtocolIE-ID ::= 223 ProtocolIE-ID ::= 226 ProtocolIE-ID ::= 227 ProtocolIE-ID ::= 228 ProtocolIE-ID ::= 324 ProtocolIE-ID ::= 229 ProtocolIE-ID ::= 230 ProtocolIE-ID ::= 29 ProtocolIE-ID ::= 225 ProtocolIE-ID ::= 232 ProtocolIE-ID ::= 3 ProtocolIE-ID ::= 246 ProtocolIE-ID ::= 255 ProtocolIE-ID ::= 256 ProtocolIE-ID ::= 257 ProtocolIE-ID ::= 258 ProtocolIE-ID ::= 259

id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD id-UL-CCTrCH-InformationModifyList-RL-ReconfRostTDD id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRostTDD id-UL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadvTDD id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD id-USCHs-to-Add id-USCH-DeleteList-RL-ReconfPrepTDD id-USCH-InformationListIE-RL-AdditionRspTDD id-USCH-InformationListIEs-RL-SetupRspTDD id-USCH-Information id-USCH-ModifyList-RL-ReconfPrepTDD id-USCHToBeAddedOrModifiedList-RL-ReconfReadvTDD id-DL-Physical-Channel-Information-RL-SetupRgstTDD id-UL-Physical-Channel-Information-RL-SetupRgstTDD id-ClosedLoopMode1-SupportIndicator id-Unused-ProtocolIE-ID-277 id-STTD-SupportIndicator id-CFNReportingIndicator id-CNOriginatedPage-PagingRgst id-InnerLoopDLPCStatus id-PropagationDelay id-RxTimingDeviationForTA id-timeSlot-ISCP id-CCTrCH-InformationItem-RL-FailureInd id-CCTrCH-InformationItem-RL-RestoreInd id-CommonMeasurementAccuracy id-CommonMeasurementObjectType-CM-Rprt id-CommonMeasurementObjectType-CM-Rgst id-CommonMeasurementObjectType-CM-Rsp id-CommonMeasurementType id-CongestionCause id-SFN id-SFNReportingIndicator id-InformationExchangeID id-InformationExchangeObjectType-InfEx-Rprt id-InformationExchangeObjectType-InfEx-Rgst id-InformationExchangeObjectType-InfEx-Rsp id-InformationReportCharacteristics id-InformationType id-neighbouring-LCR-TDD-CellInformation id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRgstTDD id-RL-LCR-InformationResponse-RL-SetupRspTDD id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD id-USCH-LCR-InformationListIEs-RL-SetupRspTDD id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRgstTDD id-RL-LCR-InformationResponse-RL-AdditionRspTDD id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD

ProtocolIE-ID ::= 260 ProtocolIE-ID ::= 261 ProtocolIE-ID ::= 262 ProtocolIE-ID ::= 263 ProtocolIE-ID ::= 264 ProtocolIE-ID ::= 265 ProtocolIE-ID ::= 266 ProtocolIE-ID ::= 267 ProtocolIE-ID ::= 268 ProtocolIE-ID ::= 269 ProtocolIE-ID ::= 270 ProtocolIE-ID ::= 271 ProtocolIE-ID ::= 272 ProtocolIE-ID ::= 273 ProtocolIE-ID ::= 274 ProtocolIE-ID ::= 275 ProtocolIE-ID ::= 276 ProtocolIE-ID ::= 277 ProtocolIE-ID ::= 279 ProtocolIE-ID ::= 14 ProtocolIE-ID ::= 23 ProtocolIE-ID ::= 24 ProtocolIE-ID ::= 25 ProtocolIE-ID ::= 36 ProtocolIE-ID ::= 37 ProtocolIE-ID ::= 15 ProtocolIE-ID ::= 16 ProtocolIE-ID ::= 280 ProtocolIE-ID ::= 281 ProtocolIE-ID ::= 282 ProtocolIE-ID ::= 283 ProtocolIE-ID ::= 284 ProtocolIE-ID ::= 18 ProtocolIE-ID ::= 285 ProtocolIE-ID ::= 286 ProtocolIE-ID ::= 287 ProtocolIE-ID ::= 288 ProtocolIE-ID ::= 289 ProtocolIE-ID ::= 290 ProtocolIE-ID ::= 291 ProtocolIE-ID ::= 292 ProtocolIE-ID ::= 58 ProtocolIE-ID ::= 65 ProtocolIE-ID ::= 66 ProtocolIE-ID ::= 75 ProtocolIE-ID ::= 76 ProtocolIE-ID ::= 77 ProtocolIE-ID ::= 78 ProtocolIE-ID ::= 79 ProtocolIE-ID ::= 80 ProtocolIE-ID ::= 81 ProtocolIE-ID ::= 86 ProtocolIE-ID ::= 87 ProtocolIE-ID ::= 88

id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadvTDD id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadvTDD id-DL-Timeslot-LCR-InformationModifvList-RL-ReconfReadvTDD id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD id-DL-Timeslot-LCR-InformationList-PhvChReconfRgstTDD id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD id-TSTD-Support-Indicator-RL-SetupRqstTDD id-RestrictionStateIndicator id-Load-Value id-Load-Value-IncrDecrThres id-OnModification id-Received-Total-Wideband-Power-Value id-Received-Total-Wideband-Power-Value-IncrDecrThres id-SFNSFNMeasurementThresholdInformation id-Transmitted-Carrier-Power-Value id-Transmitted-Carrier-Power-Value-IncrDecrThres id-TUTRANGPSMeasurementThresholdInformation id-UL-Timeslot-ISCP-Value id-UL-Timeslot-ISCP-Value-IncrDecrThres id-Rx-Timing-Deviation-Value-LCR id-DPC-Mode-Change-SupportIndicator id-Unused-ProtocolIE-ID-247 id-Unused-ProtocolIE-ID-295 id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD id-DSCH-RNTT id-DL-PowerBalancing-Information id-DL-PowerBalancing-ActivationIndicator id-DL-PowerBalancing-UpdatedIndicator id-DL-ReferencePowerInformation id-Enhanced-PrimarvCPICH-EcNo id-IPDL-TDD-ParametersLCR id-CellCapabilityContainer-FDD id-CellCapabilityContainer-TDD id-CellCapabilityContainer-TDD-LCR id-RL-Specific-DCH-Info id-RL-ReconfigurationRequestFDD-RL-InformationList id-RL-ReconfigurationRequestFDD-RL-Information-IEs id-RL-ReconfigurationReguestTDD-RL-Information id-CommonTransportChannelResourcesInitialisationNotRequired id-DelavedActivation id-DelayedActivationList-RL-ActivationCmdFDD id-DelayedActivationInformation-RL-ActivationCmdFDD id-DelayedActivationList-RL-ActivationCmdTDD id-DelayedActivationInformation-RL-ActivationCmdTDD id-neighbouringTDDCellMeasurementInformationLCR id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD

ProtocolIE-ID ::= 89 ProtocolIE-ID ::= 94 ProtocolIE-ID ::= 96 ProtocolIE-ID ::= 97 ProtocolIE-ID ::= 98 ProtocolIE-ID ::= 100 ProtocolIE-ID ::= 101 ProtocolIE-ID ::= 104 ProtocolIE-ID ::= 105 ProtocolIE-ID ::= 106 ProtocolIE-ID ::= 138 ProtocolIE-ID ::= 139 ProtocolIE-ID ::= 142 ProtocolIE-ID ::= 233 ProtocolIE-ID ::= 234 ProtocolIE-ID ::= 235 ProtocolIE-ID ::= 236 ProtocolIE-ID ::= 237 ProtocolIE-ID ::= 238 ProtocolIE-ID ::= 239 ProtocolIE-ID ::= 240 ProtocolIE-ID ::= 241 ProtocolIE-ID ::= 242 ProtocolIE-ID ::= 243 ProtocolIE-ID ::= 293 ProtocolIE-ID ::= 19 ProtocolIE-ID ::= 247 ProtocolIE-ID ::= 295 ProtocolIE-ID ::= 202 ProtocolIE-ID ::= 203 ProtocolIE-ID ::= 204 ProtocolIE-ID ::= 249 ProtocolIE-ID ::= 296 ProtocolIE-ID ::= 297 ProtocolIE-ID ::= 298 ProtocolIE-ID ::= 299 ProtocolIE-ID ::= 224 ProtocolIE-ID ::= 252 ProtocolIE-ID ::= 300 ProtocolIE-ID ::= 301 ProtocolIE-ID ::= 302 ProtocolIE-ID ::= 317 ProtocolIE-ID ::= 318 ProtocolIE-ID ::= 319 ProtocolIE-ID ::= 321 ProtocolIE-ID ::= 250 ProtocolIE-ID ::= 312 ProtocolIE-ID ::= 313 ProtocolIE-ID ::= 314 ProtocolIE-ID ::= 315 ProtocolIE-ID ::= 316 ProtocolIE-ID ::= 251 ProtocolIE-ID ::= 150 ProtocolIE-ID ::= 151

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id-PrimCCPCH-RSCP-DL-PC-RqstTDD	ProtocolIE-ID ::= 451
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 452
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 453
id-HSDSCH-FDD-Update-Information	ProtocolIE-ID ::= 466
id-HSDSCH-Information-to-Modify	ProtocolIE-ID ::= 456
${\tt id}-{\tt HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd}$	ProtocolIE-ID ::= 516
${\tt id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd}$	ProtocolIE-ID ::= 517
id-HSDSCH-RNTI	ProtocolIE-ID ::= 457
id-HSDSCH-TDD-Information	ProtocolIE-ID ::= 458
id-HSDSCH-TDD-Information-Response	ProtocolIE-ID ::= 459
id-HSDSCH-TDD-Update-Information	ProtocolIE-ID ::= 467
id-HSPDSCH-RL-ID	ProtocolIE-ID ::= 463
id-HSDSCH-MACdFlows-to-Add	ProtocolIE-ID ::= 531
id-HSDSCH-MACdFlows-to-Delete	ProtocolIE-ID ::= 532
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 148
id-TrafficClass	ProtocolIE-ID ::= 158
id-Unused-ProtocolIE-ID-248	ProtocolIE-ID ::= 248
id-Unused-ProtocolIE-ID-253	ProtocolIE-ID ::= 253
id-PDSCH-RL-ID	ProtocolIE-ID ::= 323
id-TimeSlot-RL-SetupRspTDD	ProtocolIE-ID ::= 325
id-GERAN-Cell-Capability	ProtocolIE-ID ::= 468
id-GERAN-Classmark	ProtocolIE-ID ::= 469
id-DSCH-InitialWindowSize	ProtocolIE-ID ::= 480
id-UL-Synchronisation-Parameters-LCR	ProtocolIE-ID ::= 464
id-SNA-Information	ProtocolIE-ID ::= 479
id-MAChs-ResetIndicator	ProtocolIE-ID ::= 465
$\verb"id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD"$	ProtocolIE-ID ::= 481
$\verb"id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD"$	ProtocolIE-ID ::= 482
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD	ProtocolIE-ID ::= 483
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 484
id-UL-CCTrCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 485
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 486
id-DL-CCTrCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 487
${\tt id}$ -TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 488
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 489
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD	ProtocolIE-ID ::= 490
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 491
id-UL-TimingAdvanceCtrl-LCR	ProtocolIE-ID ::= 492
id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD	ProtocolIE-ID ::= 493
id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD	ProtocolIE-ID ::= 494
id-HS-SICH-Reception-Quality	ProtocolIE-ID ::= 495
id-HS-SICH-Reception-Quality-Measurement-Value	ProtocolIE-ID ::= 496
id-HSSICH-Info-DM-Rprt	ProtocolIE-ID ::= 497
id-HSSICH-Info-DM-Rqst	ProtocolIE-ID ::= 498
id-HSSICH-Info-DM	ProtocolIE-ID ::= 499
id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD	ProtocolIE-ID ::= 500
id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD	ProtocolIE-ID ::= 501
id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD	ProtocolIE-ID ::= 502
id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD	ProtocolIE-ID ::= 503
id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD	ProtocolIE-ID ::= 504
id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD	ProtocolIE-ID ::= 505
id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD	ProtocolIE-ID ::= 506
id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD	ProtocolIE-ID ::= 507
id-DL-CCTrCH-InformationList-RL-ReconfRspTDD	ProtocolIE-ID ::= 508

id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD id-Maximum-DL-Power-TimeslotLCR-InformationItem id-Minimum-DL-Power-TimeslotLCR-InformationItem id-TDD-Support-8PSK id-TDD-maxNrDLPhysicalchannels id-ExtendedGSMCellIndividualOffset id-RL-ParameterUpdateIndicationFDD-RL-InformationList id-Primary-CPICH-Usage-For-Channel-Estimation id-Secondary-CPICH-Information id-Secondary-CPICH-Information-Change id-Unused-ProtocolIE-ID-522 id-Unused-ProtocolIE-ID-523 id-RL-ParameterUpdateIndicationFDD-RL-Information-Item id-Phase-Reference-Update-Indicator id-Unidirectional-DCH-Indicator id-RL-Information-RL-ReconfPrepTDD id-Multiple-RL-InformationResponse-RL-ReconfReadyTDD id-RL-ReconfigurationResponseTDD-RL-Information id-Satellite-Almanac-Information-ExtItem id-HSDSCH-Information-to-Modify-Unsynchronised id-TnlOos id-RTLoadValue id-NRTLoadInformationValue id-CellPortionID id-UpPTSInterferenceValue id-PrimaryCCPCH-RSCP-Delta id-UEMeasurementType id-UEMeasurementTimeslotInfoHCR id-UEMeasurementTimeslotInfoLCR id-UEMeasurementReportCharacteristics id-UEMeasurementParameterModAllow id-UEMeasurementValueInformation id-InterfacesToTraceItem id-ListOfInterfacesToTrace id-TraceDepth id-TraceRecordingSessionReference id-TraceReference id-UEIdentity id-NACC-Related-Data id-GSM-Cell-InfEx-Rqst id-MeasurementRecoveryBehavior id-MeasurementRecoveryReportingIndicator id-MeasurementRecoverySupportIndicator id-DL-DPCH-Power-Information-RL-ReconfPrepFDD id-F-DPCH-Information-RL-ReconfPrepFDD id-F-DPCH-Information-RL-SetupRgstFDD id-MBMS-Bearer-Service-List id-MBMS-Bearer-Service-List-InfEx-Rsp id-Active-MBMS-Bearer-ServiceFDD id-Active-MBMS-Bearer-ServiceTDD id-Old-URA-ID id-UE-State id-URA-ID id-HARO-Preamble-Mode

ProtocolIE-ID ::= 509 ProtocolIE-ID ::= 510 ProtocolIE-ID ::= 511 ProtocolIE-ID ::= 512 ProtocolIE-ID ::= 513 ProtocolIE-ID ::= 514 ProtocolIE-ID ::= 518 ProtocolIE-ID ::= 519 ProtocolTE-TD := 520ProtocolIE-ID ::= 521 ProtocolIE-ID ::= 522 ProtocolIE-ID ::= 523 ProtocolIE-ID ::= 524 ProtocolIE-ID ::= 525 ProtocolIE-ID ::= 526 ProtocolIE-ID ::= 527 ProtocolIE-ID ::= 528 ProtocolIE-ID ::= 529 ProtocolIE-ID ::= 530 ProtocolIE-ID ::= 533 ProtocolIE-ID ::= 534 ProtocolIE-ID ::= 535 ProtocolIE-ID ::= 536 ProtocolIE-ID ::= 537 ProtocolIE-ID ::= 538 ProtocolIE-ID ::= 539 ProtocolIE-ID ::= 540 ProtocolIE-ID ::= 541 ProtocolIE-ID ::= 542 ProtocolIE-ID ::= 543 ProtocolIE-ID ::= 544 ProtocolIE-ID ::= 545 ProtocolIE-ID ::= 546 ProtocolIE-ID ::= 547 ProtocolIE-ID ::= 548 ProtocolIE-ID ::= 549 ProtocolIE-ID ::= 550 ProtocolIE-ID ::= 551 ProtocolIE-ID ::= 552 ProtocolIE-ID ::= 553 ProtocolIE-ID ::= 554 ProtocolIE-ID ::= 555 ProtocolIE-ID ::= 556 ProtocolIE-ID ::= 557 ProtocolIE-ID ::= 558 ProtocolIE-ID ::= 559 ProtocolIE-ID ::= 560 ProtocolIE-ID ::= 561 ProtocolIE-ID ::= 562 ProtocolIE-ID ::= 563 ProtocolIE-ID ::= 564 ProtocolIE-ID ::= 568 ProtocolIE-ID ::= 569 ProtocolIE-ID ::= 571

id-SynchronisationIndicator id-UL-DPDCHIndicatorEDCH id-EDPCH-Information id-RL-Specific-EDCH-Information id-EDCH-RL-Indication id-EDCH-FDD-Information id-EDCH-RLSet-Id id-Serving-EDCHRL-Id id-EDCH-FDD-DL-ControlChannelInformation id-EDCH-FDD-InformationResponse id-EDCH-MACdFlows-To-Add id-EDCH-FDD-Information-To-Modify id-EDCH-MACdFlows-To-Delete id-EDPCH-Information-RLReconfRequest-FDD id-EDCH-MacdFlowSpecificInformationList-RL-PreemptRequiredInd id-EDCH-MacdFlowSpecificInformationItem-RL-PreemptRequiredInd id-EDCH-MacdFlowSpecificInformationList-RL-CongestInd id-EDCH-MacdFlowSpecificInformationItem-RL-CongestInd id-MBMS-Bearer-Service-Full-Address id-Initial-DL-DPCH-TimingAdjustment id-Initial-DL-DPCH-TimingAdjustment-Allowed id-User-Plane-Congestion-Fields-Inclusion id-HARQ-Preamble-Mode-Activation-Indicator id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp id-ProvidedInformation id-Active-MBMS-Bearer-ServiceFDD-PFL id-Active-MBMS-Bearer-ServiceTDD-PFL id-FrequencyBandIndicator id-Serving-cell-change-CFN id-HS-DSCH-serving-cell-change-information id-HS-DSCH-serving-cell-change-informationResponse id-E-DCH-Serving-cell-change-informationResponse id-secondary-LCR-CCPCH-Info-TDD id-E-DCH-FDD-Update-Information id-Inter-Frequency-Cell-List id-Inter-Frequency-Cell-Information id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp id-TDD-Support-PLCCH id-PLCCH-Information-UL-TimeslotLCR-Info id-PLCCH-Information-PhyChReconfRqstTDD id-TDD768-maxNrDLPhysicalchannelsTS id-RL-InformationResponse-RL-AdditionRspTDD768 id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD768 id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD768 id-UL-DPCH-InformationItem-RL-AdditionRspTDD768 id-DL-DPCH-InformationItem-RL-AdditionRspTDD768 id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768 id-UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768 id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768 id-DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768 id-secondary-CCPCH-Info-RL-ReconfReadyTDD768 id-hSSCCH-TDD-Specific-InfoList-Response768 id-hSPDSCH-TDD-Specific-InfoList-Response768

ProtocolIE-ID ::= 572 ProtocolIE-ID ::= 573 ProtocolIE-ID ::= 574 ProtocolIE-ID ::= 575 ProtocolIE-ID ::= 576 ProtocolIE-ID ::= 577 ProtocolIE-ID ::= 578 ProtocolIE-ID ::= 579 ProtocolIE-ID ::= 580 ProtocolIE-ID ::= 581 ProtocolIE-ID ::= 582 ProtocolIE-ID ::= 583 ProtocolIE-ID ::= 584 ProtocolIE-ID ::= 585 ProtocolIE-ID ::= 586 ProtocolIE-ID ::= 587 ProtocolIE-ID ::= 588 ProtocolIE-ID ::= 589 ProtocolIE-ID ::= 590 ProtocolIE-ID ::= 591 ProtocolIE-ID ::= 592 ProtocolIE-ID ::= 593 ProtocolIE-ID ::= 594 ProtocolIE-ID ::= 595 ProtocolIE-ID ::= 596 ProtocolIE-ID ::= 597 ProtocolIE-ID ::= 598 ProtocolIE-ID ::= 599 ProtocolIE-ID ::= 600 ProtocolIE-ID ::= 601 ProtocolIE-ID ::= 602 ProtocolIE-ID ::= 603 ProtocolIE-ID ::= 604 ProtocolIE-ID ::= 605 ProtocolIE-ID ::= 606 ProtocolIE-ID ::= 607 ProtocolIE-ID ::= 608 ProtocolIE-ID ::= 609 ProtocolIE-ID ::= 610 ProtocolIE-ID ::= 611 ProtocolIE-ID ::= 612 ProtocolIE-ID ::= 613 ProtocolIE-ID ::= 614 ProtocolIE-ID ::= 615 ProtocolIE-ID ::= 616 ProtocolIE-ID ::= 617 ProtocolIE-ID ::= 618 ProtocolIE-ID ::= 619 ProtocolIE-ID ::= 620 ProtocolIE-ID ::= 621 ProtocolIE-ID ::= 622 ProtocolIE-ID ::= 623 ProtocolIE-ID ::= 624 ProtocolIE-ID ::= 625

1122

id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD768 id-UL-Timeslot-InformationList-PhyChReconfRostTDD768 id-DL-Timeslot-InformationList-PhyChReconfRostTDD768 id-CellCapabilityContainer-TDD768 id-multiple-DedicatedMeasurementValueList-TDD768-DM-Rsp id-neighbouringTDDCellMeasurementInformation768 id-UEMeasurementTimeslotInfo768 id-Rx-Timing-Deviation-Value-768 id-UEMeasurementValueTransmittedPowerList768 id-UEMeasurementValueTimeslotISCPList768 id-RL-InformationResponse-RL-SetupRspTDD768 id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD768 id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD768 id-UL-DPCH-InformationItem-RL-SetupRspTDD768 id-DL-DPCH-InformationItem-RL-SetupRspTDD768 id-TDD768-minimumSpreadingFactor-UL id-TDD768-minimumSpreadingFactor-DL id-TDD768-maxNrDLPhysicalchannels id-DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD id-DPCH-ID768-DM-Rsp id-DPCH-ID768-DM-Rost id-DPCH-ID768-DM-Rprt id-EDPCH-Information-RLAdditionReg-FDD id-HSDSCH-Configured-Indicator id-RxTimingDeviationForTAext id-RxTimingDeviationForTA768 id-Rx-Timing-Deviation-Value-ext id-E-DCH-PowerOffset-for-SchedulingInfo id-TrCH-SrcStatisticsDescr id-E-DCH-Information id-E-DCH-Serving-RL-ID id-E-DCH-Information-Reconfig id-E-DCH-Information-Response id-E-DCH-768-Information id-E-DCH-768-Information-Reconfig id-E-DCH-768-Information-Response id-ExtendedPropagationDelay id-Extended-Round-Trip-Time-Value id-AlternativeFormatReportingIndicator id-DCH-Indicator-For-E-DCH-HSDPA-Operation id-E-RGCH-E-HICH-ChannelisationCodeValidityIndicator id-E-DCH-Minimum-Set-E-TFCIValidityIndicator id-Fast-Reconfiguration-Mode id-Fast-Reconfiguration-Permission id-Continuous-Packet-Connectivity-DTX-DRX-Information id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response id-CPC-Information id-MIMO-InformationResponse id-E-DCH-LCR-Information id-E-DCH-LCR-Information-Reconfig id-E-DCH-LCR-Information-Response id-HS-PDSCH-Code-Change-Grant id-HS-PDSCH-Code-Change-Indicator

ProtocolIE-ID ::= 626 ProtocolIE-ID ::= 627 ProtocolIE-ID ::= 628 ProtocolIE-ID ::= 629 ProtocolIE-ID ::= 630 ProtocolIE-ID ::= 631 ProtocolIE-ID ::= 632 ProtocolIE-ID ::= 633 ProtocolIE-ID ::= 634 ProtocolIE-ID ::= 635 ProtocolIE-ID ::= 636 ProtocolIE-ID ::= 637 ProtocolIE-ID ::= 638 ProtocolIE-ID ::= 639 ProtocolIE-ID ::= 640 ProtocolIE-ID ::= 641 ProtocolIE-ID ::= 642 ProtocolIE-ID ::= 643 ProtocolIE-ID ::= 644 ProtocolIE-ID ::= 645 ProtocolIE-ID ::= 646 ProtocolIE-ID ::= 647 ProtocolIE-ID ::= 648 ProtocolIE-ID ::= 649 ProtocolIE-ID ::= 650 ProtocolIE-ID ::= 651 ProtocolIE-ID ::= 652 ProtocolIE-ID ::= 653 ProtocolIE-ID ::= 654 ProtocolIE-ID ::= 655 ProtocolIE-ID ::= 656 ProtocolIE-ID ::= 657 ProtocolIE-ID ::= 658 ProtocolIE-ID ::= 659 ProtocolIE-ID ::= 660 ProtocolIE-ID ::= 661 ProtocolIE-ID ::= 662 ProtocolIE-ID ::= 663 ProtocolIE-ID ::= 664 ProtocolIE-ID ::= 665 ProtocolIE-ID ::= 666 ProtocolIE-ID ::= 667 ProtocolIE-ID ::= 668 ProtocolIE-ID ::= 669 ProtocolIE-ID ::= 670 ProtocolIE-ID ::= 671 ProtocolIE-ID ::= 672 ProtocolIE-ID ::= 673 ProtocolIE-ID ::= 675 ProtocolIE-ID ::= 677 ProtocolIE-ID ::= 678 ProtocolIE-ID ::= 679 ProtocolIE-ID ::= 680 ProtocolIE-ID ::= 681

id-Extended-SRNC-ID id-Extended-RNC-ID id-SixtyfourOAM-DL-SupportIndicator id-Enhanced-FACH-Support-Indicator id-Enhanced-FACH-Information-ResponseFDD id-HSDSCH-MACdPDUSizeFormat id-MaximumMACdPDU-SizeExtended id-F-DPCH-SlotFormat id-F-DPCH-SlotFormatSupportRequest id-eDCH-MACdFlow-Retransmission-Timer-LCR id-Max-UE-DTX-Cycle id-GANSS-Common-Data id-GANSS-Information id-GANSS-Generic-Data id-TUTRANGANSSMeasurementThresholdInformation id-TUTRANGANSSMeasurementValueInformation id-Ext-Reference-E-TFCI-PO id-Ext-Max-Bits-MACe-PDU-non-scheduled id-HARO-MemoryPartitioningInfoExtForMIMO id-MIMO-ActivationIndicator id-MIMO-Mode-Indicator id-MIMO-N-M-Ratio id-TransportBearerNotSetupIndicator id-TransportBearerNotReguestedIndicator id-PowerControlGAP id-UARFCNforNt. id-LCRTDD-uplink-Physical-Channel-Capability id-number-Of-Supported-Carriers id-HSSICH-SIRTarget id-HSSICH-TPC-StepSize id-tSN-Length id-HS-SICH-ID-Extension id-HSSICH-Info-DM-Rgst-Extension id-multipleFreg-HSPDSCH-InformationList-ResponseTDDLCR id-multicarrier-number id-UPPCHPositionLCR id-UpPCH-InformationList-LCRTDD id-UpPCH-InformationItem-LCRTDD id-Multiple-PLMN-List id-UE-Capabilities-Info id-FrameOffset id-ChipOffset id-Enhanced-PCH-Capability id-SixteenOAM-UL-Operation-Indicator id-E-TFCI-Boost-Information id-SixtvfourOAM-UsageAllowedIndicator id-SixtvfourOAM-DL-UsageIndicator id-Default-Serving-Grant-in-DTX-Cycle2 id-E-DPDCH-PowerInterpolation id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory id-E-DCH-MACdPDUSizeFormat id-Continuous-Packet-Connectivity-HS-SCCH-Less-Deactivate-Indicator id-E-DCH-DL-Control-Channel-Change-Information id-E-DCH-DL-Control-Channel-Grant-Information

ProtocolTE-TD := 693ProtocolIE-ID ::= 694 ProtocolIE-ID ::= 695 ProtocolIE-ID ::= 699 ProtocolIE-ID ::= 700 ProtocolIE-ID ::= 701 ProtocolIE-ID ::= 702 ProtocolIE-ID ::= 703 ProtocolIE-ID ::= 705 ProtocolIE-ID ::= 706 ProtocolIE-ID ::= 707 ProtocolIE-ID ::= 708 ProtocolIE-ID ::= 709 ProtocolIE-ID ::= 710 ProtocolIE-ID ::= 711 ProtocolIE-ID ::= 712 ProtocolIE-ID ::= 713 ProtocolIE-ID ::= 714 ProtocolIE-ID ::= 715 ProtocolIE-ID ::= 716 ProtocolIE-ID ::= 717 ProtocolIE-ID ::= 718 ProtocolIE-ID ::= 719 ProtocolIE-ID ::= 720 ProtocolIE-ID ::= 721 ProtocolIE-ID ::= 722 ProtocolIE-ID ::= 723 ProtocolIE-ID ::= 724 ProtocolIE-ID ::= 725 ProtocolIE-ID ::= 726 ProtocolIE-ID ::= 727 ProtocolIE-ID ::= 728 ProtocolIE-ID ::= 729 ProtocolIE-ID ::= 730 ProtocolIE-ID ::= 731 ProtocolIE-ID ::= 732 ProtocolIE-ID ::= 733 ProtocolIE-ID ::= 734 ProtocolIE-ID ::= 735 ProtocolIE-ID ::= 736 ProtocolIE-ID ::= 737 ProtocolIE-ID ::= 738 ProtocolIE-ID ::= 739 ProtocolIE-ID ::= 740 ProtocolIE-ID ::= 741 ProtocolIE-ID ::= 742

ProtocolIE-ID ::= 682

ProtocolIE-ID ::= 683

ProtocolIE-ID ::= 684

ProtocolIE-ID ::= 685

ProtocolIE-ID ::= 686

ProtocolIE-ID ::= 690

ProtocolIE-ID ::= 691 ProtocolIE-ID ::= 692

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id-MaximumNumber-Of-Retransmission-For-SchedulingInfo-LCRTDD	ProtocolIE-ID ::= 743
id-E-DCH-RetransmissionTimer-For-SchedulingInfo-LCRTDD	ProtocolIE-ID ::= 744
id-E-PUCH-PowerControlGAP	ProtocolIE-ID ::= 745
id-HSDSCH-TBSizeTableIndicator	ProtocolIE-ID ::= 746
id-UE-with-enhanced-HS-SCCH-support-indicator	ProtocolIE-ID ::= 747
id-DGANSS-Corrections-Req	ProtocolIE-ID ::= 748
id-E-AGCH-Table-Choice	ProtocolIE-ID ::= 749
id-RANAP-EnhancedRelocationInformationRequest	ProtocolIE-ID ::= 750
id-RANAP-EnhancedRelocationInformationResponse	ProtocolIE-ID ::= 751
id-Common-EDCH-MAC-d-Flow-Specific-InformationFDD	ProtocolIE-ID ::= 752
id-Common-EDCH-Support-Indicator	ProtocolIE-ID ::= 753
id-E-RNTI	ProtocolIE-ID ::= 754
id-Released-CN-Domain	ProtocolIE-ID ::= 755
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rqst	ProtocolIE-ID ::= 756
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp	ProtocolIE-ID ::= 757
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt	ProtocolIE-ID ::= 758
id-MBMS-Cell-InfEx-Rqst	ProtocolIE-ID ::= 759
id-MBMS-Cell-InfEx-Rsp	ProtocolIE-ID ::= 760
id-MBMS-Cell-InfEx-Rprt	ProtocolIE-ID ::= 761
id-Counting-Information	ProtocolIE-ID ::= 762
id-Transmission-Mode-Information	ProtocolIE-ID ::= 763
id-MBMS-Neighbouring-Cell-Information	ProtocolIE-ID ::= 764
id-MBMS-RLC-Sequence-Number-Information	ProtocolIE-ID ::= 765
id-RLC-Sequence-Number	ProtocolIE-ID ::= 766
id-Neighbouring-E-UTRA-CellInformation	ProtocolIE-ID ::= 767
id-MBSFN-Cluster-Identity	ProtocolIE-ID ::= 769
id-MCCH-Configuration-Info	ProtocolIE-ID ::= 770
id-MCCH-Message-List	ProtocolIE-ID ::= 771
id-MBSFN-Scheduling-Transmission-Time-Interval-Info-List	ProtocolIE-ID ::= 772
id-GANSS-Time-ID	ProtocolIE-ID ::= 773
id-GANSS-AddIonoModelReq	ProtocolIE-ID ::= 774
id-GANSS-EarthOrientParaReg	ProtocolIE-ID ::= 775
id-GANSS-AddNavigationModelsReg	ProtocolIE-ID ::= 776
id-GANSS-AddUTCModelsReg	ProtocolIE-ID ::= 777
id-GANSS-AuxInfoReg	ProtocolIE-ID ::= 778
id-GANSS-SBAS-ID	ProtocolIE-ID ::= 779
id-GANSS-ID	ProtocolIE-ID ::= 780
id-GANSS-Additional-Ionospheric-Model	ProtocolIE-ID ::= 781
id-GANSS-Earth-Orientation-Parameters	ProtocolIE-ID ::= 782
id-GANSS-Additional-Time-Models	ProtocolIE-ID ::= 783
id-GANSS-Additional-Navigation-Models	ProtocolIE-ID ::= 784
id-GANSS-Additional-UTC-Models	ProtocolIE-ID ::= 785
id-GANSS-Auxiliary-Information	ProtocolIE-ID ::= 786
id-MinimumReducedE-DPDCH-GainFactor	ProtocolIE-ID ::= 787
id-Enhanced-FACH-Information-ResponseLCR	ProtocolIE-ID ::= 788
id-Common-EDCH-MAC-d-Flow-Specific-InformationLCR	ProtocolIE-ID ::= 789
id-HSDSCH-PreconfigurationSetup	ProtocolIE-ID ::= 790
id-HSDSCH-PreconfigurationInfo	ProtocolIE-ID ::= 791
id-NoOfTargetCellHS-SCCH-Order	ProtocolIE-ID ::= 791
id-EnhancedHSServingCC-Abort	ProtocolIE-ID ::= 793
id-Additional-HS-Cell-Information-RL-Setup	ProtocolIE-ID ::= 794
id-Additional-HS-Cell-Information-Response	ProtocolIE-ID ::= 794 ProtocolIE-ID ::= 795
id-Additional-HS-Cell-Information-RL-Addition	ProtocolIE-ID ::= 795
id-Additional-HS-Cell-Change-Information-Response	ProtocolIE-ID ::= 797
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id-Additional-HS-Cell-Information-RL-Reconf-Prep id-Additional-HS-Cell-Information-RL-Reconf-Reg id-Additional-HS-Cell-RL-Reconf-Response id-Additional-HS-Cell-Information-RL-Param-Upd id-Secondary-Serving-Cell-List id-MultiCarrier-HSDSCH-Physical-Layer-Category id-IdleIntervalInformation id-NeedforIdleInterval id-IdleIntervalConfigurationIndicator id-ContinuousPacketConnectivity-DRX-InformationLCR id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR id-E-AGCH-UE-Inactivity-Monitor-Threshold id-CPC-InformationLCR id-E-DCH-Semi-PersistentScheduling-Information-LCR id-HS-DSCH-Semi-PersistentScheduling-Information-LCR id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR id-MIMO-SFMode-For-HSPDSCHDualStream id-MIMO-SFMode-Supported-For-HSPDSCHDualStream id-MIMO-ReferenceSignal-InformationListLCR id-GANSS-alm-keplerianNAVAlmanac id-GANSS-alm-keplerianReducedAlmanac id-GANSS-alm-keplerianMidiAlmanac id-GANSS-alm-keplerianGLONASS id-GANSS-alm-ecefSBASAlmanac id-DL-RLC-PDU-Size-Format id-MACes-Maximum-Bitrate-LCR id-Single-Stream-MIMO-ActivationIndicator id-Single-Stream-MIMO-Mode-Indicator id-Dual-Band-Secondary-Serving-Cell-List id-UE-AggregateMaximumBitRate id-power-offset-for-S-CPICH-for-MIMO id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator id-UE-SupportIndicatorExtension id-ActivationInformation id-CellPortionLCRID id-Additional-EDCH-Cell-Information-RL-Setup-Req id-Additional-EDCH-Cell-Information-Response id-Additional-EDCH-Cell-Information-RL-Add-Reg id-Additional-EDCH-Cell-Information-Response-RLAdd id-Additional-EDCH-Cell-Information-RL-Reconf-Prep id-Additional-EDCH-Cell-Information-RL-Reconf-Reg id-Additional-EDCH-Cell-Information-RL-Param-Upd id-Additional-EDCH-Preconfiguration-Information id-MulticellEDCH-Information id-Additional-EDCH-Cell-Information-ResponseRLReconf id-EDCH-Indicator id-DiversityMode id-TransmitDiversityIndicator id-NonCellSpecificTxDiversity id-CellCapabilityContainerExtension-FDD id-HSDSCH-Physical-Layer-Category id-E-RNTI-For-FACH id-H-RNTI-For-FACH

ProtocolIE-ID ::= 798 ProtocolIE-ID ::= 799 ProtocolIE-ID ::= 800 ProtocolIE-ID ::= 801 ProtocolIE-ID ::= 802 ProtocolIE-ID ::= 803 ProtocolIE-ID ::= 804 ProtocolIE-ID ::= 805 ProtocolIE-ID ::= 806 ProtocolIE-ID ::= 807 ProtocolIE-ID ::= 808 ProtocolIE-ID ::= 809 ProtocolIE-ID ::= 810 ProtocolIE-ID ::= 811 ProtocolIE-ID ::= 812 ProtocolIE-ID ::= 813 ProtocolIE-ID ::= 814 ProtocolIE-ID ::= 815 ProtocolIE-ID ::= 816 ProtocolIE-ID ::= 817 ProtocolIE-ID ::= 818 ProtocolIE-ID ::= 819 ProtocolIE-ID ::= 820 ProtocolIE-ID ::= 821 ProtocolIE-ID ::= 822 ProtocolIE-ID ::= 823 ProtocolIE-ID ::= 824 ProtocolIE-ID ::= 825 ProtocolIE-ID ::= 826 ProtocolIE-ID ::= 827 ProtocolIE-ID ::= 828 ProtocolIE-ID ::= 829 ProtocolIE-ID ::= 830 ProtocolIE-ID ::= 831 ProtocolIE-ID ::= 835 ProtocolIE-ID ::= 836 ProtocolIE-ID ::= 837 ProtocolIE-ID ::= 838 ProtocolIE-ID ::= 839 ProtocolIE-ID ::= 840 ProtocolIE-ID ::= 841 ProtocolIE-ID ::= 842 ProtocolIE-ID ::= 843 ProtocolIE-ID ::= 844 ProtocolIE-ID ::= 845 ProtocolIE-ID ::= 854 ProtocolIE-ID ::= 855 ProtocolIE-ID ::= 856 ProtocolIE-ID ::= 857 ProtocolIE-ID ::= 858 ProtocolIE-ID ::= 859 ProtocolIE-ID ::= 860 ProtocolIE-ID ::= 861 ProtocolIE-ID ::= 862

id-RNTI-Allocation-Indicator ProtocolIE-ID ::= 863 id-UE-AggregateMaximumBitRate-Enforcement-Indicator ProtocolIE-ID ::= 864 id-DCH-MeasurementOccasion-Information ProtocolIE-ID ::= 865 id-DCH-MeasurementType-Indicator ProtocolIE-ID ::= 866 id-Out-of-Sychronization-Window ProtocolIE-ID ::= 867 id-MulticellEDCH-RL-SpecificInformation ProtocolIE-ID ::= 868 id-DGNSS-ValiditvPeriod ProtocolIE-ID ::= 869 id-TS0-HS-PDSCH-Indication-LCR ProtocolIE-ID ::= 870 id-UE-TS0-CapabilityLCR ProtocolIE-ID ::= 871 id-Non-Serving-RL-Preconfig-Info ProtocolIE-ID ::= 872 id-Non-Serving-RL-Preconfig-Setup ProtocolIE-ID ::= 873 id-Non-Serving-RL-Preconfig-Removal ProtocolIE-ID ::= 874 id-Additional-E-DCH-Non-Serving-RL-Preconfiguration-Setup ProtocolIE-ID ::= 875 id-Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList ProtocolIE-ID ::= 876 id-CellListValidityIndicator ProtocolIE-ID ::= 877 id-completeAlmanacProvided ProtocolIE-ID ::= 878 id-ganss-Delta-T ProtocolIE-ID ::= 879 id-OrdinalNumberOfFrequency ProtocolIE-ID ::= 880 id-Multicell-EDCH-Restriction ProtocolIE-ID ::= 882 id-CellCapabilityContainerExtension-TDD-LCR ProtocolIE-ID ::= 883 id-Multi-Carrier-EDCH-Setup ProtocolIE-ID ::= 884 id-Multi-Carrier-EDCH-Reconfigure ProtocolIE-ID ::= 885 id-Multi-Carrier-EDCH-Response ProtocolIE-ID ::= 886 id-SNPL-Carrier-Group-Indicator ProtocolIE-ID ::= 887 id-MU-MIMO-InformationLCR ProtocolIE-ID ::= 888 id-MU-MIMO-Indicator ProtocolIE-ID ::= 889 id-HS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext ProtocolIE-ID ::= 890 id-Usefulness-Of-Battery-Optimization ProtocolIE-ID ::= 891 id-Multi-Carrier-E-DCH-LCRTDD-PhysicalLaverCategory ProtocolIE-ID ::= 892 id-Measurement-Power-Offset ProtocolIE-ID ::= 893 id-MDT-Configuration ProtocolIE-ID ::= 894 id-Neighbouring-UMTS-CellInformation-Ext ProtocolIE-ID ::= 895 id-Neighbouring-UMTS-CellInformationExtensionItem ProtocolIE-ID ::= 896 id-Control-Type-InformationTransferControlReg ProtocolIE-ID ::= 897 id-UMTS-Cells-Info ProtocolIE-ID ::= 898 id-ANRReportIndication ProtocolIE-ID ::= 899 id-ANR-Cell-InfEx-Rqst ProtocolIE-ID ::= 900 id-ANR-Cell-InfEx-Rsp ProtocolIE-ID ::= 901 id-ANR-Cell-Information ProtocolIE-ID ::= 902 id-Trace-Collection-Entity-IP-Address ProtocolIE-ID ::= 904 id-Affected-HSDSCH-Serving-Cell-List ProtocolIE-ID ::= 905 id-UL-CLTD-Information ProtocolIE-ID ::= 906 id-UL-CLTD-Information-Reconf ProtocolIE-ID ::= 907 id-UL-CLTD-State-Update-Information ProtocolIE-ID ::= 908 id-Support-of-Dvnamic-DTXDRX-Related-HS-SCCH-Order ProtocolIE-ID ::= 909 id-CPC-RecovervReport ProtocolIE-ID ::= 910 ProtocolIE-ID ::= 911 id-FTPICH-Information id-FTPICH-Information-Reconf ProtocolIE-ID ::= 912 id-UE-RF-Band-CapabilityLCR ProtocolIE-ID ::= 913 ProtocolIE-ID ::= 914 id-Extended-S-RNTI id-ExtendedAffectedUEInformationForMBMS ProtocolIE-ID ::= 915 id-Extended-S-RNTI-Group ProtocolIE-ID ::= 916 id-FTPICH-Information-Response ProtocolIE-ID ::= 917 id-FTPICH-Reconfiguration-Information ProtocolIE-ID ::= 918

id-MIMO-withfourtransmitantennas-ActivationIndicator	ProtocolIE-ID ::= 919
id-MIMO-withfourtransmitantennas-ModeIndicator	ProtocolIE-ID ::= 920
id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas	ProtocolIE-ID ::= 921
id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indi	cator ProtocolIE-ID ::= 922
id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator	ProtocolIE-ID ::= 923
id-DualStream-MIMO-withfourtransmitantennas-ModeIndicator	ProtocolIE-ID ::= 924
id-Additional-Associated-Secondary-CPICH	ProtocolIE-ID ::= 925
id-UE-transmission-power-headroom	ProtocolIE-ID ::= 926
id-Multiflow-Information	ProtocolIE-ID ::= 927
id-Multiflow-Reconfiguration	ProtocolIE-ID ::= 928
id-Multiflow-OrdinalNumberOfFrequency	ProtocolIE-ID ::= 929
id-UL-MIMO-Information	ProtocolIE-ID ::= 930
id-UL-MIMO-Reconfiguration	ProtocolIE-ID ::= 931
id-UL-MIMO-DL-Control-Channel-Information	ProtocolIE-ID ::= 932
id-SixtyfourQAM-UL-Operation-Indicator	ProtocolIE-ID ::= 933
id-Common-E-RGCH-Cell-InfEx-Rqst	ProtocolIE-ID ::= 935
id-Common-E-RGCH-Cell-InfEx-Rsp	ProtocolIE-ID ::= 936
id-Common-E-RGCH-Cell-InfEx-Rprt	ProtocolIE-ID ::= 937
id-Common-E-RGCH-Cell-Information	ProtocolIE-ID ::= 938
id-SpeechVersion	ProtocolIE-ID ::= 2048
id-SourceID	ProtocolIE-ID ::= 2049
id-TargetID	ProtocolIE-ID ::= 2050
id-ClassmarkInformation2	ProtocolIE-ID ::= 2051
id-ClassmarkInformation3	ProtocolIE-ID ::= 2052
id-GSM-Cell-CM-Rqst	ProtocolIE-ID ::= 2053
id-Extension-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 2054
id-Extension-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 2055
id-Extension-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 2056
id-Extension-FailureIndicationMeasurementList	ProtocolIE-ID ::= 2057
id-Extension-FailureMeasurementList	ProtocolIE-ID ::= 2058
id-Extension-TerminationMeasurementList	ProtocolIE-ID ::= 2059
id-GsmCellList-CM-Rprt	ProtocolIE-ID ::= 2060
id-GsmCellList-CM-Rqst	ProtocolIE-ID ::= 2061
id-GsmCellList-CM-Rsp	ProtocolIE-ID ::= 2062
id-LoadValue	ProtocolIE-ID ::= 2063
id-EventH	ProtocolIE-ID ::= 2064

END

### 9.3.7 Container Definitions

itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-Containers (5) }

DEFINITIONS AUTOMATIC TAGS ::=

}

}

}

BEGIN - --- IE parameter types from other modules. - -IMPORTS maxPrivateIEs, maxProtocolExtensions, maxProtocolIEs, Criticality, Presence, PrivateIE-ID, ProtocolIE-ID FROM RNSAP-CommonDataTypes; - --- Class Definition for Protocol IEs - -RNSAP-PROTOCOL-IES ::= CLASS { &id ProtocolIE-ID UNIQUE, Criticality, &criticality &Value, &presence Presence WITH SYNTAX { ID &id CRITICALITY &criticality TYPE &Value PRESENCE &presence \*\*\*\*\*\*\* - --- Class Definition for Protocol IEs - -RNSAP-PROTOCOL-IES-PAIR ::= CLASS { &id ProtocolIE-ID UNIQUE, &firstCriticality Criticality, &FirstValue, &secondCriticality Criticality, &SecondValue, &presence Presence WITH SYNTAX { ID &id FIRST CRITICALITY &firstCriticality

&FirstValue FIRST TYPE SECOND CRITICALITY &secondCriticality SECOND TYPE &SecondValue PRESENCE &presence } - -- --- Class Definition for Protocol Extensions - -RNSAP-PROTOCOL-EXTENSION ::= CLASS { &id ProtocolIE-ID UNIQUE, &criticality Criticality, &Extension, &presence Presence WITH SYNTAX { &id ID CRITICALITY &criticality EXTENSION &Extension PRESENCE &presence } \*\*\*\*\*\* - --- Class Definition for Private IEs - -\*\*\*\*\*\*\* - -RNSAP-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 {RNSAP-PROTOCOL-IES : IesSetParam} ::= SEQUENCE (SIZE (0..maxProtocolles)) OF ProtocolIE-Field {{IesSetParam}}

```
ProtocolIE-Single-Container {RNSAP-PROTOCOL-IES : IesSetParam} ::=
   ProtocolIE-Field {{IesSetParam}}
ProtocolIE-Field {RNSAP-PROTOCOL-IES : IesSetParam} ::= SEQUENCE {
   id
                RNSAP-PROTOCOL-IES.&id
                                              ({IesSetParam}),
                                                     ({IesSetParam}{@id}),
   criticality
                  RNSAP-PROTOCOL-IES.&criticality
                                                     ({IesSetParam}{@id})
   value
                   RNSAP-PROTOCOL-IES.&Value
    ******************
  Container for Protocol IE Pairs
     ProtocolIE-ContainerPair {RNSAP-PROTOCOL-IES-PAIR : IesSetParam} ::=
   SEQUENCE (SIZE (0..maxProtocolles)) OF
   ProtocolIE-FieldPair {{IesSetParam}}
ProtocolIE-FieldPair {RNSAP-PROTOCOL-IES-PAIR : IesSetParam} ::= SEQUENCE {
   id
                RNSAP-PROTOCOL-IES-PAIR.&id
                                              ({IesSetParam}),
   firstCriticality
                      RNSAP-PROTOCOL-IES-PAIR.&firstCriticality ({IesSetParam}{@id}),
                                                        ({IesSetParam}{@id}),
   firstValue
                   RNSAP-PROTOCOL-IES-PAIR.&FirstValue
   secondCriticality RNSAP-PROTOCOL-IES-PAIR.&secondCriticality ({IesSetParam}{@id}),
                                                            ({IesSetParam}{@id})
   secondValue RNSAP-PROTOCOL-IES-PAIR. & SecondValue
     _ _
  Container Lists for Protocol IE Containers
_ _
  ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, RNSAP-PROTOCOL-IES : lesSetParam} ::=
   SEQUENCE (SIZE (lowerBound..upperBound)) OF
   ProtocolIE-Container {{IesSetParam}}
ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, RNSAP-PROTOCOL-IES-PAIR : IesSetParam} ::=
   SEQUENCE (SIZE (lowerBound..upperBound)) OF
   ProtocolIE-ContainerPair {{IesSetParam}}
    _ _
-- Container for Protocol Extensions
  ProtocolExtensionContainer {RNSAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::=
   SEQUENCE (SIZE (1..maxProtocolExtensions)) OF
   ProtocolExtensionField {{ExtensionSetParam}}
ProtocolExtensionField {RNSAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
                RNSAP-PROTOCOL-EXTENSION.&id
                                                  ({ExtensionSetParam}),
   id
                   RNSAP-PROTOCOL-EXTENSION.&criticality
                                                        ({ExtensionSetParam}{@id}),
   criticality
```

extensionValue RNSAP-PROTOCOL-EXTENSION.&Extension ({ExtensionSetParam}{@id})

```
}
   ***********
__ *
- -
-- Container for Private IEs
- -
PrivateIE-Container {RNSAP-PRIVATE-IES : IesSetParam} ::=
   SEQUENCE (SIZE (1..maxPrivateIEs)) OF
   PrivateIE-Field {{IesSetParam}}
PrivateIE-Field {RNSAP-PRIVATE-IES : IesSetParam} ::= SEQUENCE {
               RNSAP-PRIVATE-IES.&id
                                       ({IesSetParam}),
   id
   criticality
                  RNSAP-PRIVATE-IES.&criticality
                                            ({IesSetParam}{@id}),
                                        ({IesSetParam}{@id})
   value
               RNSAP-PRIVATE-IES.&Value
}
```

END

## 9.4 Message Transfer Syntax

RNSAP shall use the ASN.1 Basic Packed Encoding Rules (BASIC-PER) Aligned Variant as transfer syntax as specified in ITU-T Rec. X.691 [20].

### 9.5 Timers

 $T_{Preempt}$ 

- Specifies the maximum time that a DRNS may wait for pre-emption of resources for establishment or reconfiguration of Radio Links.

T<sub>RELOCprep</sub>

- Specifies the maximum time for the Enhanced Relocation procedure in the SRNC.

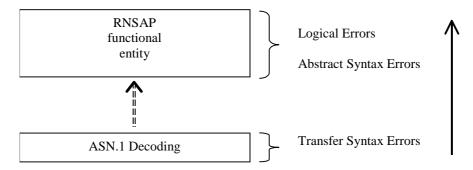
# 10 Handling of Unknown, Unforeseen and Erroneous Protocol Data

## 10.1 General

Protocol Error cases can be divided into three classes:

- 1. Transfer Syntax Error;
- 2. Abstract Syntax Error;
- 3. Logical Error.

Protocol errors can occur in the following functions within a receiving node.



#### Figure 34: Protocol Errors in RNSAP

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 RNSAP entity:

- 1. Receives IEs or IE groups that cannot be understood (unknown IE 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 10.3.6.

### 10.3.2 Criticality Information

In the RNSAP 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:

- 1. Reject IE;
- 2. Ignore IE and Notify Sender;
- 3. 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 a 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, RNSAP 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 f the concerned object of class RNSAP-PROTOCOL-IES, RNSAP-PROTOCOL-IES-PAIR, RNSAP-PROTOCOL-EXTENSION or RNSAP-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 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 information 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 subclauses 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 DRNS

# 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 UE in the DRNS 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 UE in the DRNS, 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 UE in the DRNS 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 "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 DRNS 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 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 DRNS.

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 DRNS 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 DRNS shall initiate the Radio Link Pre-emption procedure for all the UE 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 DRNS 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 DRNS shall reject the procedure that triggered the pre-emption process 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.

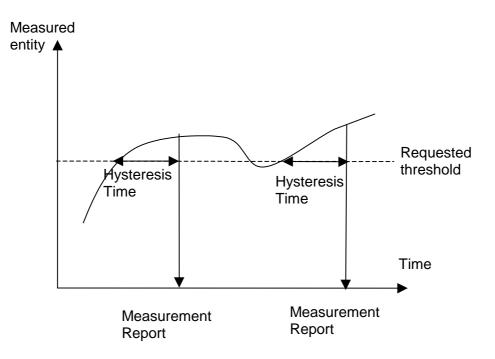


Figure B.1: Event A reporting with Hysteresis Time specified

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.

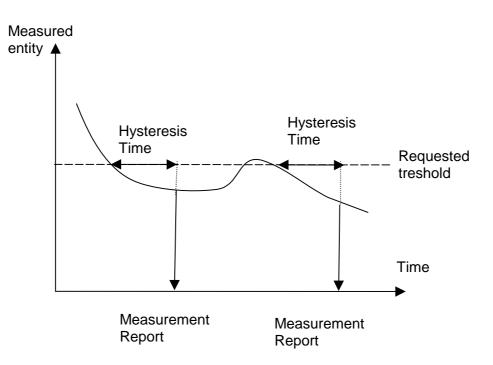
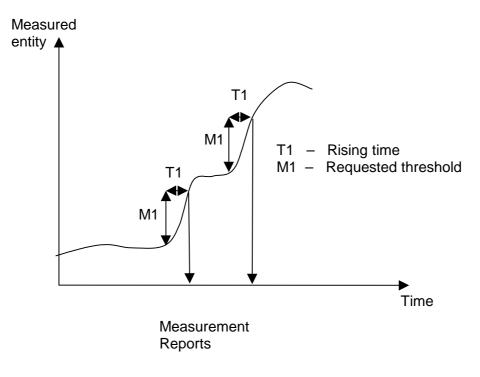


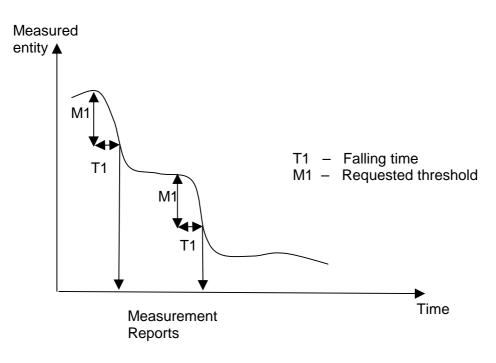
Figure B.2: Event B reporting with Hysteresis Time specified

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.





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.





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 DRNS 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) the Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

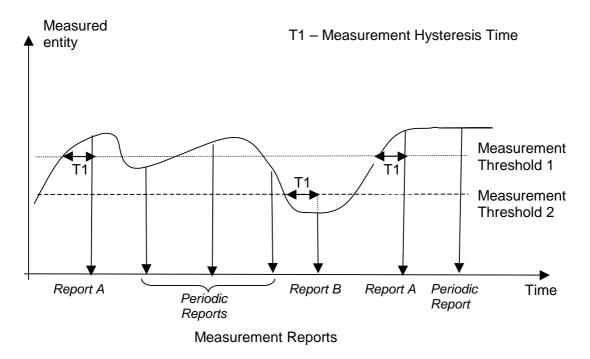
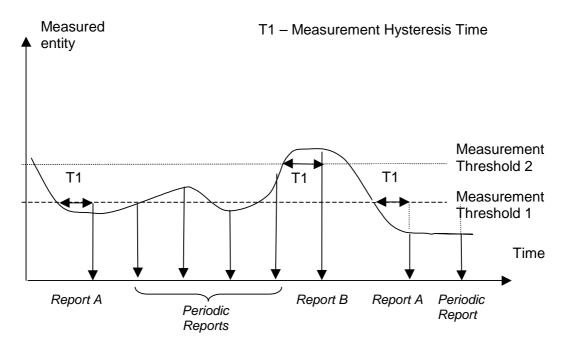


Figure B.5: Event E reporting with Hysteresis Time specified and Periodic Reporting requested

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 DRNS 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

When the *Report Characteristics* IE is set to "Event H" (figure B.7), the Measurement Reporting procedure (Report A) is initiated when the measurement value of measured entity rises above the *Measurement Threshold 1* and stays above the threshold for the *Measurement Hysteresis Time* ( $T_1$  in figure B.7).] The measurement value of measured entity in Report A substitutes the *Measurement Base value* for the consequent measurement reporting.

When the Report A conditions has been met and the measurement value of measured entity rises above or falls below the *Measurement Base Value* by *Measurement Fluctuation Range* (H<sub>1</sub> in figure B.7), and stays there for the *Measurement Hysteresis Time* (T<sub>h</sub> in figure B.7) counting from the beginning of every *Report Periodicity*, the Measurement Reporting procedure (Report B or Report C) is initiated. The the measurement value of measured entity in (Report B or Report C) substitutes the *Measurement Base value* for the consequent measurement reporting.

When the Report A conditions have been met and the measurement value of measured entity falls below the *Measurement Threshold 2* and stays there for the *Measurement Hysteresis Time* ( $T_h$  in figure B.7), the Measurement Reporting procedure (Report D) is initiated and the reporting is terminated.

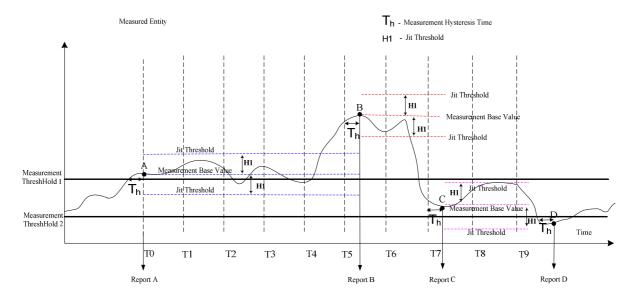


Figure B.7: Event H reporting with Hysteresis Time specified and Periodic Reporting requested

# 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				_	
A	М				YES	reject
В	М				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	М				YES	reject
>>J		1 <maxj></maxj>			-	
>>>G		03,			EACH	reject
С	М				YES	reject
>K		1 <maxk></maxk>			EACH	ignore and notify
>>L		1 <maxl></maxl>			-	-
>>>M	0				-	
D	М				YES	reject

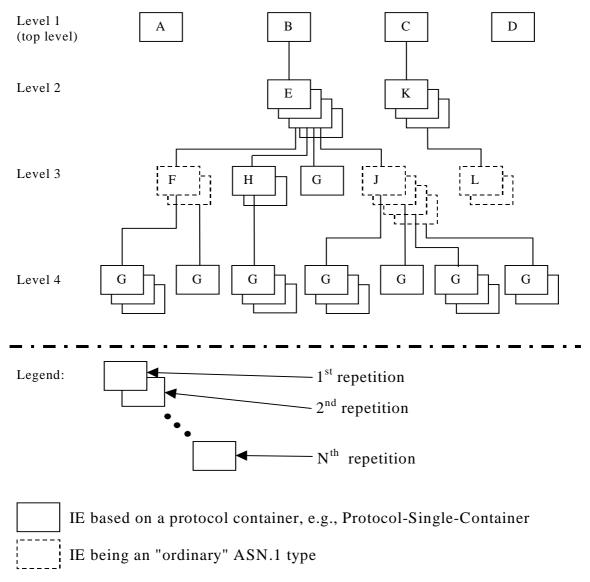
Note 1. The IEs F, J, and L do not have assigned criticality. The IEs F, J, and L are consequently realised as the ASN.1 type SEQUENCE OF of "ordinary" ASN.1 type, e.g. INTEGER. On the other hand, the repeatable IEs with assigned criticality are realised as the ASN.1 type SEQUENCE OF of an IE object, e.g. ProtocolIE-Single-Container.

For the corresponding ASN.1 layout, see subclause C.4.

ETSI

## C.2 Example on a Received EXAMPLE MESSAGE

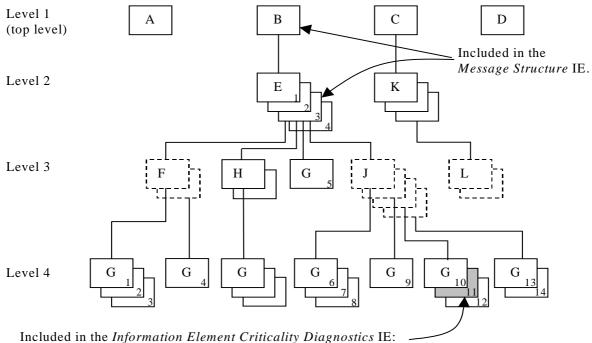
Assume further more that a received message based on the above tabular format is according to the figure below.



#### Figure C.1: Example of content of a received RNSAP 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

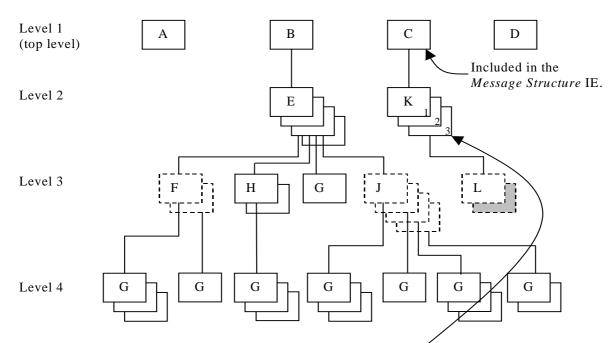
#### Figure C.2: Example of a received RNSAP message containing a not comprehended IE

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 rep	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	e, 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



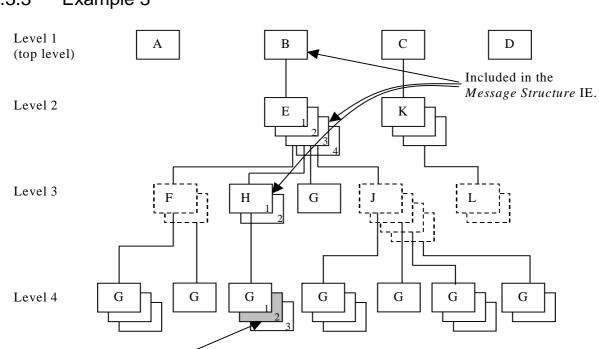
- Included in the Information Element Criticality Diagnostics IE: •
- a) IE ID IE
- b) Repetition Number IE

#### Figure C.3: Example of a received RNSAP 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.



- Included in the Information Element Criticality Diagnostics IE:
- a) IE ID IE
- b) Repetition Number IE

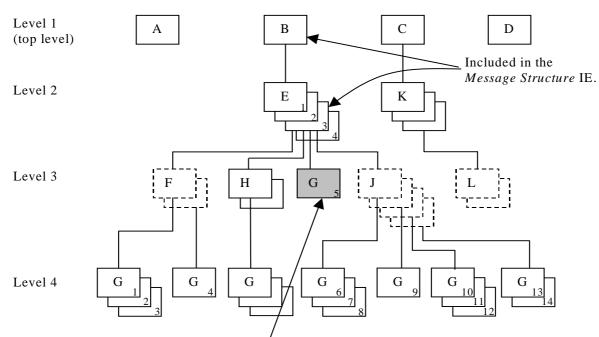
#### Figure C.4: Example of a received RNSAP message containing a not comprehended IE

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	petition
>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.3.3 Example 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 RNSAP message containing a not comprehended IE

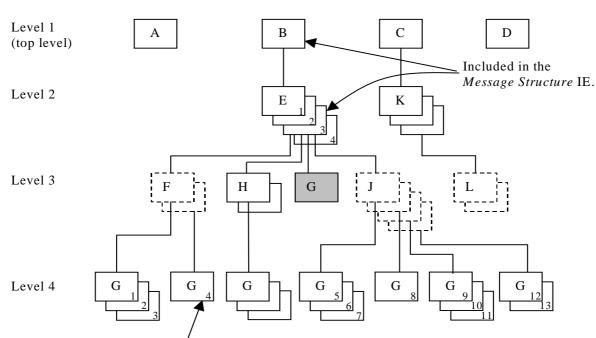
If there is an error within the instance marked as grey in the IE G in the IE E shown in the figure C.5 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

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 Structur	e, first repe	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	re, 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).

Example 5

C.3.5



- Included in the Information Element Criticality Diagnostics IE:
- a) *IE ID* IE
- b) Repetition Number IE

#### Figure C.6: Example of a received RNSAP 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	4	Repetition number up to the missing IE on the reported level, i.e. level 3.
Number		(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
Turner of France		occurrence.
Type of Error	missing	
Message Structur	e, first repe	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	re, 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 {
    ProtocolIEs ProtocolIE-Container {{ExampleMessage-Ies}},
    ProtocolExtensions ProtocolExtensionContainer {{ExampleMessage-Extensions}} OPTIONAL,
    ...
}
ExampleMessage-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-A CRITICALITY reject TYPE A PRESENCE mandatory} |
```

```
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```

```
{ 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,
    e
    iE-Extensions ProtocolExtensionContainer { {B-ExtIEs} } OPTIONAL,
    . . .
}
B-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
E-List ::= SEQUENCE (SIZE (1..maxE)) OF ProtocolIE-Single-Container { {E-IEs} }
E-Ies RNSAP-PROTOCOL-IES ::= {
    { ID id-E CRITICALITY ignore TYPE E PRESENCE mandatory }
}
E ::= SEQUENCE {
    f
                     F-List,
    h
                     H-List.
    g
                     G-List1
                    J-List,
    iE-Extensions ProtocolExtensionContainer { {E-ExtIEs} } OPTIONAL,
    . . .
}
E-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
}
F-List ::= SEQUENCE (SIZE (1..maxF)) OF F
F ::= SEQUENCE {
                    G-List2 OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {F-ExtIEs} } OPTIONAL,
    . . .
}
F-ExtIEs
          RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
}
G-List2 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G2-IES} }
G2-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-G CRITICALITY ignore TYPE G PRESENCE mandatory }
}
H-List := SEQUENCE (SIZE (1..maxH)) OF Protocolle-Single-Container { {H-IEs} }
H-Ies RNSAP-PROTOCOL-IES ::= {
    { ID id-H CRITICALITY ignore TYPE H PRESENCE mandatory }
}
H ::= SEQUENCE {
                     G-List3 OPTIONAL,
                                  ProtocolExtensionContainer { {H-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
}
H-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
}
G-List3 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G3-IEs} }
G3-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-G CRITICALITY notify TYPE G PRESENCE mandatory }
}
G-List1 ::= ProtocolIE-Single-Container { {G1-IEs} }
G1-IES RNSAP-PROTOCOL-IES ::= {
```

```
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```

```
{ ID id-G CRITICALITY reject TYPE G PRESENCE mandatory }
}
J-List ::= SEQUENCE (SIZE (1..maxJ)) OF J
J ::= SEQUENCE {
                   G-List4 OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {J-ExtIEs} } OPTIONAL,
   . . .
}
           RNSAP-PROTOCOL-EXTENSION ::= {
J-ExtIEs
  • • •
}
G-List4 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G4-IEs} }
G4-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY reject TYPE G PRESENCE mandatory }
}
C ::= SEQUENCE {
                   K-List,
    k
   iE-Extensions ProtocolExtensionContainer { {C-ExtIEs} } OPTIONAL,
    . . .
}
C-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
K-List ::= SEQUENCE (SIZE (1..maxK)) OF ProtocolIE-Single-Container { {K-IEs} }
K-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-K CRITICALITY notify TYPE K PRESENCE mandatory }
}
K ::= SEQUENCE {
   1
                   L-List,
   iE-Extensions ProtocolExtensionContainer { {K-ExtIEs} } OPTIONAL,
   . . .
}
K-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  . . .
}
L-List ::= SEQUENCE (SIZE (1..maxL)) OF L
L ::= SEQUENCE {
                   M OPTIONAL,
   m
   iE-Extensions ProtocolExtensionContainer { {L-ExtIEs} } OPTIONAL,
   . . .
}
L-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  . . .
}
ExampleMessage-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
}
```

# Annex D (normative): DRNS Behaviour at SRNC or RNSAP Signalling Bearer Failure

This annex describes the DRNC actions in the event of SRNC or RNSAP Signalling Bearer failure when all or some of the UE Contexts related to the SRNC need to be removed in DRNC.

## D.1 Detection of SRNC or RNSAP Signalling Bearer/Connection Failure

Termination of all or some of the UE Contexts in DRNC which are related to an SRNC may be triggered due to failure of SRNC, RNSAP Signalling Bearer or the Iur signalling connection of an UE(s).

## D.1.1 Termination of all UE Contexts Related to a Specific SRNC

Termination of all UE Contexts in DRNC which are related to a specific SRNC is triggered if the RNSAP Signalling Bearer failure is detected by the RNSAP according to the procedure described in the sub-clause 4.5.1.5.1 of TS 25.420. By "all" UE Contexts, it means all Ues having dedicated and/or common channel resources.

## D.1.2 Termination of Specific UE Context

Termination of a specific UE Context in DRNC is triggered for an UE which has dedicated transport channel resources according to the procedure described in the sub-clause 4.5.1.5.2 of TS 25.420.

## D.2 DRNC Actions at UE Context Termination

When termination of the UE Context is required, the DRNC shall remove any common and/or dedicated radio resources related to the UE Context. The DRNC shall also initiate release of the dedicated or common user plane resources that were involved in these UE contexts. In addition, if it is possible the DRNC shall release the RRC connection.

# Annex E (informative): Change History

45         RP-090771         121         2         Introduction of UE AMBR concept in UMTS         9,0.0           45         RP-090772         1528         1. Introduction of Dual-Band HSDPA         9,0.0           46         RP-090772         1536         1. Introduction of Dual-Band HSDPA         9,0.0           46         RP-09178         1536         1. Introduction of Cell Portion for 1.28 Mep TDD         9,1.0           46         RP-09118         1544         1. Single Stream MIMC for DC-HSDPA         9,1.0           46         RP-09118         1544         Correction of denormal conditions for Dual-Band MIMC for DC-HSDPA         9,1.0           46         RP-09118         1555         1. Clarification of the meaning of BIT STRING type IEs for SPS operation for 1.28Meps         9,1.0           47         Dirule Corrections of aborema to conditions for DC-HSDPA         9,1.0         1.0           46         RP-091179         1567         STTD is cell specific in Dual-Cell HSDPA         9,1.0           47         RP-091179         1567         Correction of aCHS HSPA condition for Dual-Band Microbit Correction of acHSDPA         9,1.0           48         RP-091179         1567         Correction of ACH BAPA condition for Dual-Band Microbit Correction of acHSDPA         9,1.0           48         RP-00117	TSG #	TSG Doc.	CR	Rev	Subject/Comment	New
45         RP-090774         1522         1         Introduction of TaAA axtension for non-MIMO Use         9.0.0           45         RP-090773         1532         1         Introduction of Dual-Band MSDPA         9.0.0           45         RP-09173         1536         1         Introduction of MIMO for DC HSDPA         9.0.0           46         RP-091187         1541         1         Single Stream MIMO for DC HSDPA         9.1.0           46         RP-091187         1541         1         Carliadian decativation of the meaning of BIT STNIKG type IEs for SPS operation for 1.28Mops         9.1.0           46         RP-091181         1558         1         MAC-e Reset Indicator for MAC-1 Reset         9.1.0           46         RP-091181         1558         1         MAC-e Reset Indicator for MAC-1 Reset         9.1.0           46         RP-091181         1558         1         MAC-e Reset Indicator for MAC-1 Reset         9.1.0           47         RP-091181         1558         1         MAC-e Reset Indicator for MAC-1 Reset         9.1.0           48         RP-0911781         1573         Correction on IE * 6ACH Table Choice'         9.1.0           49         RP-01178         1571         Addition of MAC-e Resomat Indicator         9.1.0	09/2009	-	-	-	Release 9 version created based on v8.6.0	9.0.0
45         RP-090772         1520         2         Introduction of Dual-Band HSDPA         9.0.0           46         RP-09178         1536         Introduction of Cell Portion for 1.28 Mpgs TDD         9.1.0           46         RP-091178         1541         Single Stream MIMO for DC+SDPA         9.1.0           46         RP-091181         1541         Carrection of abnormal conditions for Dual cell HS-DSCH in RLAddition procedure         9.1.0           46         RP-091181         1551         Carrection of abnormal conditions for Dual cell HS-DSCH in RLAddition procedure         9.1.0           46         RP-091181         1563         I         McCare Reset Indicator for MAC-1 Reset         9.1.0           46         RP-091181         1563         I         McCare Reset Indicator for MAC-1 Reset         9.1.0           46         RP-091179         1667         STITD is cell specific in Dual-Cell HSDPA         9.1.0           47         RP-091179         1573         Carection on CP48CPA ACCH Table Choice         9.1.0           48         RP-091179         1573         Carection on CP48 HSPA CapcHT Table Choice         9.1.0           47         RP-100215         1576         Addition of HSBPA CapcHT Table Choice         9.1.0           47         RP-100215         15	45	RP-090777	1521	2	Introduction of UE AMBR concept in UMTS	9.0.0
45         RP-090773         1536         1         Introduction of VaIMO for DC HSDPA         9.0.0           46         RP-091188         1540         1         Single Stream MIMO for DC-HSDPA         9.1.0           46         RP-091186         1542         -         Activation and deactivation of L28 Mops TDD         9.1.0           46         RP-091181         1554         1         Carrection of abnormal conditions for Dual cell HS-DSCH in RL Addition procedure         9.1.0           46         RP-091181         1558         1         Carrection of the meaning of BT STRING type IEs for SPS operation for 1.28Mops         9.1.0           47         RP-091181         1558         1         MAC-e Reset Indicator for MAC-I Reset         9.1.0           48         RP-091178         1567         STTD is cell specific in Dual-Cell HSDPA         9.1.0           48         RP-091181         1567         STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091187         1573         Correction of Dual Cell E-COL Hode of operation         9.1.0           47         RP-100219         1571         Removal of MAC-ahs format indicator         9.1.0           48         RP-01187         1573         Correction of DE-HSDPA Capabiliiy rinto RNSAP         9.1.0	45	RP-090774	1528	1	Introduction of TxAA extension for non-MIMO Ues	9.0.0
46         RP-091188         1540         -         Introduction of Cell Portion for 128 Mogs TDD         9.1.0           46         RP-091186         1542         -         Activation and deactivation of secondary carrier in non serving Node B         9.1.0           46         RP-091180         1544         -         Activation and deactivation of secondary carrier in non serving Node B         9.1.0           46         RP-091180         1551         1         Carrection of anomal conditions for Dual-Cell HS-DSCh In RL Addition procedure         9.1.0           46         RP-091181         1558         1         MAC-a Reset Indicator for MAC-I Reset         9.1.0           46         RP-091179         1563         1         Wong ref in tabular         9.1.0           46         RP-091179         1575         STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091178         1574         Removal of MAC-ahs format Indicator         9.1.0           47         RP-100215         1576         Addition of HS-DSCAPapiliky into RNSAP         9.1.0           47         RP-100215         1577         Addition of HS-DSCAPapiliky into RNSAP         9.1.0           47         RP-100215         1578         Addition of HS-DSCAPapiliky into RNSAP         9.2.0	45	RP-090772	1529	2	Introduction of Dual-Band HSDPA	9.0.0
46         RP-091187         1541         1         Single Stream MIMO for DC-HSDPA         9.1.0           46         RP-091180         1542         1         Correction of abnormal conditions for Dual cell HS-DSCH in RL Addition procedure         9.1.0           46         RP-091181         1558         1         Clarification of the meaning of BIT STRING type IEs for SPS operation for 128Mcps         9.1.0           46         RP-091181         1568         1         Clarification of the meaning of BIT STRING type IEs for SPS operation for 128Mcps         9.1.0           46         RP-091181         1568         1         Wrong ref in tabular         9.1.0           47         RP-091187         1567         Introduction of Dual Cell E-OCH mode of operation         9.1.0           48         RP-091187         1571         Removal of MAC-refs format indicator         9.1.0           48         RP-091187         1572         Introduction of TE-R-GCH Table Choles"         9.1.0           49         RP-100219         1571         Removal of MAC-refs format indicator         9.1.0           47         RP-100219         1571         Introduction of TE-R-GCH Table Choles"         9.1.0           47         RP-100219         1581         Correction of DC-HSPA Capability in tur         9.2.0	45	RP-090773	1536	1	Introduction of MIMO for DC HSDPA	9.0.0
46         RP-091187         1541         1         Single Stream MIMO for DC-HSDPA         9.1.0           46         RP-091182         1544         1         Correction of abnormal conditions for Dual cell HS-DSCH in RL Addition procedure         9.1.0           46         RP-091181         1558         1         Clarification of the meaning of BIT STRING type IEs for SPS operation for 128Mcps         9.1.0           46         RP-091181         1560         -         Futher Corrections for DC-HSDPA         9.1.0           46         RP-091181         1560         -         Futher Corrections for DC-HSDPA         9.1.0           46         RP-091178         1567         STTD is cell specific in Dual-Cell HSDPA         9.1.0           47         RP-091187         1571         Removal of MAC-eth Sformat Indicator         9.1.0           48         RP-091187         1572         Correction on Eth=CACHT Table Cholore'         9.1.0           47         RP-100219         1577         Lendottochtochtochtochtochtochtochtochtochto	46	RP-091188	1540	-	Introduction of Cell Portion for 1.28 Mcps TDD	9.1.0
46         RP-091186         1542         Adivation and deactivation of secondary carrier in non serving Node B         9.1.0           46         RP-091180         1551         1         Correction of abnormal conditions for Dual el IH-SDSCH in R. Addition procedure         9.1.0           46         RP-091180         1558         1         MAC-e Reset Indicator for MAC-I Reset         9.1.0           46         RP-091179         1563         1         WAC-e Reset Indicator for MAC-I Reset         9.1.0           46         RP-091179         1563         1         Wrong ref in tabular         9.1.0           46         RP-091178         1576         STID is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091178         1573         Correction or DL*C-GAPA Capability into RNSAP         9.1.0           46         RP-091178         1577         Introduction of Red HSPA Capability into RNSAP         9.1.0           47         RP-100216         1577         Introduction of Red HSPA Capability into RNSAP         9.1.0           47         RP-100216         1577         Aldition of OBAPA Capability into RNSAP         9.2.0           47         RP-100216         1578         Addition of CACHAPA CAH from Cell DCH         9.2.0           47         RP-100221 <td>46</td> <td>RP-091187</td> <td>1541</td> <td>1</td> <td></td> <td>9.1.0</td>	46	RP-091187	1541	1		9.1.0
46         RP-091182         1544         1         Correction of abnormal conditions for Dual cell H5-DSCH in RL Addition procedure         9.1.0           46         RP-091181         1558         1         Clarification of the meaning of BIT STRING type IEs for SPS operation for 1.28Mcps         9.1.0           46         RP-091181         1558         1         MACe Reset Indicator for MAC-I Reset         9.1.0           46         RP-091179         1553         1         Wrong ref         9.1.0           46         RP-091179         1571         Istication of Dual-Cell HSDPA         9.1.0           46         RP-0911781         1571         Introduction of Dual-Cell FDOCH mode of operation         9.1.0           47         RP-1002151         1576         Introduction on IE T=-ACRH Table Choice*         9.1.0           47         RP-1002151         1577         I. E-RNTI Allocation for UE moves to Cell FACH from Cell DCH         9.2.0           47         RP-1002151         1576         Addition of the 10-SDCH physical layer category over lur         9.2.0           47         RP-1002151         1584         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-1002151         1581         Correction of Multi-cell Capability Report in lur         9.2.0	46	RP-091186	1542	-	Activation and deactivation of secondary carrier in non serving Node B	
46         RP-091180         1551         1         Clarification of the meaning of BIT STRING type IEs for SPS operation for 1.28Mcps         9.1.0           46         RP-091181         1550         1         MACe Reset Indicator for MAC-I Reset         9.1.0           46         RP-091179         1563         1         Wrong ref in tabular         9.1.0           47         RP-091179         1563         1         Wrong ref in tabular         9.1.0           48         RP-091178         1573         Correction on Dual-Cell HSDPA         9.1.0           48         RP-091178         1573         Correction on IE "E-AGCH Table Choics"         9.1.0           47         RP-100215         1576         Addition of Deat PSDPA Capability intor RNSAP         9.1.0           47         RP-100215         1577         Allow reconfiguration of some les in RL Addition procedure         9.2.0           47         RP-100215         1566         Correction of Nutl-cell Capability in lur         9.2.0           47         RP-100215         1567         Introduction of Hodescription of source law rule results on table results on	46			1		
46         RP-091181         1558         1         MAC-e Reset Indicator for MAC-I Reset         9.1.0           46         RP-091178         1563         1         Wrong ref in tabular         9.1.0           46         RP-091178         1563         1         Wrong ref in tabular         9.1.0           47         RP-091178         1573         Corrections for D-LaCeH HSDPA         9.1.0           48         RP-091178         1573         Correction on E 'E-AGCH Table Choice'         9.1.0           46         RP-091178         1577         Introduction on E 'E-AGCH Table Choice'         9.1.0           47         RP-100218         1577         Introduction on E 'E-AGCH Table Choice'         9.1.0           47         RP-100218         1577         Introduction of DC-HSDPA Capability into RNSAP         9.2.0           47         RP-100218         1581         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100218         1584         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100218         1586         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100218         1584         Correction of Multi-cell Capability Report in lur         9.2.0<	46			1		
46         RP-091182         1560         -         Further Corrections for DC-HSDPA         9.1.0           46         RP-091179         1563         STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091187         1567         Introduction of Dual Cell HSDPA         9.1.0           46         RP-091186         1568         Introduction of Dual Cell HSDPA         9.1.0           46         RP-091186         1574         Introduction on DIE "E-ARCH Table Choloc"         9.1.0           47         RP-100216         1574         Introduction of Re9 HSPA Capability into RNAP         9.1.0           47         RP-100216         1577         Introduction of DC-HSDPA Capability into RNAP         9.2.0           47         RP-100216         1577         Allow reconfiguration of some lesi in RL Addition procedure         9.2.0           47         RP-100216         1586         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100220         1588         Introduction of MBI-Cell Capability Reptor In lur         9.2.0           47         RP-100220         1582         Introduction of LB-RDSCH resources on TS0 for 1.28Mcps TDD         9.2.0           47         RP-100220         1582         Introduction of LB-Aggregate Maximum Bit Rate	10		4550			0.4.0
46         RP-091179         1963         1         Wrong ref in tabular         9.1.0           47         RP-091186         1568         2         Introduction of Dual Cell E>OCH mode of operation         9.1.0           46         RP-091186         15671         Removal of MAC-ehs format indicator         9.1.0           46         RP-091179         1571         Correction on IE 'E-AGCH Table Choice'         9.1.0           47         RP-100215         1576         Addition on IE'' E-AGCH Table Choice'         9.1.0           47         RP-100215         1577         E-RNTI Allocation for UE moves to Cell_FACH from Cell_DCH         9.2.0           47         RP-100215         1578         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100215         1581         Correction of Ch-HSDPA Capability in lur         9.2.0           47         RP-100215         1586         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100215         1586         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230         1583         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230         1583         Addition of CONSA Vaility Period				1		
46         RP-091179         1967         STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091186         1160         Introduction of Dual Cell E-DCH mode of operation         9.1.0           46         RP-091186         1574         Introduction of Dual Cell E-DCH mode of operation         9.1.0           47         RP-100215         1576         Introduction of DE "E-ACFI Table Choics"         9.1.0           47         RP-100215         1577         Introduction of DE "HSDPA Capability into RNSAP         9.2.0           47         RP-100215         1577         Introduction of DC HSDPA Capability into RNSAP         9.2.0           47         RP-100215         1577         Introduction of DC HSDPA Capability intor         9.2.0           47         RP-100215         1586         Correction of DC HSDPA Capability intur         9.2.0           47         RP-100220         1588         Introduction of Multi-cell Capability Reptor In lur         9.2.0           47         RP-100230         1582         Introduction of DL SSDPA HSPAICE CELL FACH from CELL FAC HTD         9.2.0           47         RP-100230         1593         Introduction of Multi-cell Capability Reptor In lur         9.2.0           47         RP-100230         1593         Introduction of UL SSD				-		
46         RP-091186         1568         2         Introduction of Dual Cell E-DCH mode of operation         9.1.0           46         RP-091179         1571         Removal of MAC-ehs format indicator         9.1.0           46         RP-091176         1574         1         Introduction of Re9 HSPA Capability into RNSAP         9.1.0           47         RP-100215         1576         1         Addition of HS-DSCH physical layer category over lur         9.2.0           47         RP-100215         1577         1         E-RNTI Allocation for UE moves to Cell FACH from Cell DCH         9.2.0           47         RP-100215         1578         Adoition of MS-DSC from Cearcing and the Cearcing on Sem les in RL Addition procedure         9.2.0           47         RP-100215         1588         Correction of C-HSDPA Capability in lur         9.2.0           47         RP-100215         1587         1         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230         1587         1         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230         1592         Rele Pino230         1582         1         1.0           47         RP-100230         1592         Relevino23         1.4 Additi				1		
46         RP-091187         1571         Removal of MAC-ehs format indicator         9.10           46         RP-091186         1574         1         Introduction of E-GCH Table Choice"         9.10           46         RP-100215         1576         Addition of IS-DSCH physical layer category over lur         9.20           47         RP-100215         1577         I E-RNT IAllocation for UE moves to Cell FACH from Cell DCH         9.2.0           47         RP-100215         1579         I Allow reconfiguration of some les in RL Addition procedure         9.2.0           47         RP-100215         1586         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-1002215         1586         Correction of Mult-eall Capability Report in lur         9.2.0           47         RP-1002215         1586         Correction of Mult-eall Capability Report in lur         9.2.0           47         RP-100220         1583         1         Correction of Mult-eall Capability Report in lur         9.2.0           47         RP-100220         1583         1         Correction of Mult-eall Capability Report in lur         9.2.0           47         RP-1002216         1584         1         Introduction of HS-PDSCH resources on TS0 for 1.28Mcps TDD         9.2.0           <				_		-
46         RP-091179         1573         Correction on E "E-AGCH Table Choice"         9.1.0           47         RP-100215         1576         Addition of HS-DSCH physical layer category over lur         9.2.0           47         RP-100215         1577         I E-RNTI Allocation for UE moves to Cell FACH from Cell_DCH         9.2.0           47         RP-100215         1579         Allow reconfiguration of some tes in RL Addition procedure         9.2.0           47         RP-100215         1581         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100215         1584         Correction for the description of E-OCH serving radio link IE for E-DCH semi-persistent         9.2.0           47         RP-1002215         1586         Combrining E-DCH Radio Links within the RLS         9.2.0           47         RP-1002216         1587         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230         1582         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100230         1593         Addition of Procedural Text on E-NT1 Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100231         1593         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0 <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td>				2		
46         RP-091186         1574         1         Introduction of Re9 HSPA Capability into RNSAP         9.1.0           47         RP-100215         1577         1         E-RNTI Allocation for UE moves to Cell FACH from Cell DCH         9.2.0           47         RP-100219         1551         1         E-RNTI Allocation for UE moves to Cell FACH from Cell DCH         9.2.0           47         RP-100219         1551         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100215         1586         Correction of U-CHSDPA Capability in lur         9.2.0           47         RP-100221         1587         1         Correction of U-CHSDPA Capability in lur         9.2.0           47         RP-100220         1588         1         Introduction of HS-PDSCH resources on TS0 for 1.28Mcps TDD         9.2.0           47         RP-100230         1582         1         Introduction of U-HSQPS transition of Enhanced CELL FACH UE for LCR TDD         9.2.0           47         RP-100230         1592         Rel-9 Flexible cell combinations in DC-HSDPA         9.2.0           47         RP-100230         1593         1         Addition of DGNSS Validity Period in RNSAP         9.2.0           47         RP-100230         15961         1         Introduction of						-
47         RP-100216         1576         Addition of HS-DSCH physical layer category over lur         9.2.0           47         RP-100215         1571         E-RNTI Allocation for UE moves to Cell FACH from Cell DCH         9.2.0           47         RP-100215         1570         Allow reconfiguration of some les in RL Addition procedure         9.2.0           47         RP-100215         1584         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100215         1584         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-1002215         1585         Incorrection of Multi-cell Capability Report in lur         9.2.0           47         RP-100230         1588         Introduction of HS-DSCH resources on TSO for 1.28Mops TDD         9.2.0           47         RP-100230         1593         1         Addition of DGNSS Validity Period in RNSAP         9.2.0           47         RP-100230         1593         1         Addition of UE Aggregate Maximum Bt Rate Enforcement Indicator         9.2.0           47         RP-100230         1593         1         Addition of NSAP         9.2.0           47         RP-100230         1593         1         Addition of DGNSS Validity Period in RNSAP         9.2.0           4	46					
47         RP-100219         1577         1         E-RNTI Allocation for UE moves to Cell FACH from Cell DCH         9.2.0           47         RP-100219         1581         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100219         1584         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100219         1584         Correction of ML-HSDPA Capability in lur         9.2.0           47         RP-100220         1587         Correction of ML-HSDPA Capability in lur         9.2.0           47         RP-100230         1588         Correction of ML-HSDPA Capability Report in lur         9.2.0           47         RP-100230         1582         Correction to state transition of Enhanced CELL_FACH UE for LCR TDD         9.2.0           47         RP-100230         1592         Rei-9 Fiexble cell combinations in DC-HSDPA         9.2.0           47         RP-100230         1593         1         Addition of DGNS Validity Period in RNSAP         9.2.0           47         RP-100231         1597         1         Addition of Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100231         1597         1         Maddition of DCH LDCH for 128Mops TDD         9.2.0 <td< td=""><td>46</td><td></td><td></td><td>1</td><td></td><td></td></td<>	46			1		
47         RP-100215         1579         Allow reconfiguration of some les in RL Addition procedure         9.2.0           47         RP-100218         1584         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100215         1584         Correction for the description of E-DCH serving radio link IE for E-DCH 128 Mcps TDD         9.2.0           47         RP-100230         1597         2         Measurement occasion configuration in CELL DCH for 1.28 Mcps TDD         9.2.0           47         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change	47					
47         RP-100219         1581         Correction of DC-HSDPA Capability in fur         9.2.0           47         RP-100216         1584         Correction for the description of E-DCH serving radio link IE for E-DCH semi-persistent         9.2.0           47         RP-100220         1587         1         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100220         1587         1         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100220         1587         1         Correction of State transition of Enhanced CELL_FACH UE for LCR TDD         9.2.0           47         RP-100221         1593         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100229         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100230         1597         2         Measurement occasion configuration in CELL DCH for 1.28 Mcps TDD         9.2.0           47         RP-100231         1604         Indication of Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100221         1606         Rapporteur's update of RNSAP protocol         9.2.0           47	47			1		
47         RP-100218         1584         Correction for the description of E-DCH serving radio link IE for E-DCH semi-persistent operation         9.2.0           47         RP-100215         1586         Combining E-DCH Radio Links within the RLS         9.2.0           47         RP-100220         1587         1         Correction of Multi-cell Capability Report in Iur         9.2.0           47         RP-100230         1588         Introduction of HS-DDSCH resources on TS0 for 1.28Mcps TDD         9.2.0           47         RP-100230         1593         1         Addition of DSNS Validity Period in RNSAP         9.2.0           47         RP-100230         1593         1         Addition of DCNSS Validity Period in RNSAP         9.2.0           47         RP-100230         1593         1         Addition of DCNSS Validity Period in RNSAP         9.2.0           47         RP-100230         1593         1         Addition of DCNSS Validity Period in RNSAP         9.2.0           47         RP-100230         1593         1         Madition of DCNSS Validity Period in RNSAP         9.2.0           47         RP-100231         1596         1         Syncrectization at E-NTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100221         1606         1	47					
operation         operation           47         RP-100215         1586         Combining E-DCH Radio Links within the RLS         9.2.0           47         RP-100220         1587         1         Correction of Multi-cell Capability Report in Iur         9.2.0           47         RP-100220         1588         2         Introduction of HS-PDSCH resources on TS0 for 1.28Mcps TDD         9.2.0           47         RP-100217         1591         3         Correction to state transition of Enhanced CELL_FACH UE for LCR TDD         9.2.0           47         RP-100220         1593         1         Addition of DGNS Validity Period in RNSAP         9.2.0           47         RP-100221         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100216         1591         1         Introduction of DE coding Weight Set Restriction are CPC for 1.28 Mcps TDD         9.2.0           47         RP-100216         1601         Correction to the Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100221         1606         Correction at the of NSAP protocol         9.2.0           47         RP-100221         1606         Correction text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0 <td>47</td> <td>RP-100219</td> <td>1581</td> <td></td> <td>Correction of DC-HSDPA Capability in Iur</td> <td>9.2.0</td>	47	RP-100219	1581		Correction of DC-HSDPA Capability in Iur	9.2.0
47         RP-100220         1587         1         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230         1588         2         Introduction of HS-PDSCH resources on TS0 for 1.28Mcps TDD         9.2.0           47         RP-100230         1592         2         Rel-9 Flexible cell combinations in DC-HSDPA         9.2.0           47         RP-100230         1592         2         Rel-9 Flexible cell combinations in DC-HSDPA         9.2.0           47         RP-100221         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100230         1592         2         Measurement occasion configuration in CEL DCH for 1.28 Mcps TDD         9.2.0           47         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100221         1605         Rapporteur's update of RNSAP protocol         9.2.0           47         RP-100221         1606         Corrections to DC HSUPA         9.2.0           47         RP-100221         1606         Correction of Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100224         1606         Correc	47	RP-100218	1584			9.2.0
47         RP-100220         1587         1         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230         1588         2         Introduction of HS-PDSCH resources on TS0 for 1.28Mcps TDD         9.2.0           47         RP-100230         1592         2         Rel-9 Flexible cell combinations in DC-HSDPA         9.2.0           47         RP-100230         1592         2         Rel-9 Flexible cell combinations in DC-HSDPA         9.2.0           47         RP-100221         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100230         1592         2         Measurement occasion configuration in CEL DCH for 1.28 Mcps TDD         9.2.0           47         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100221         1605         Rapporteur's update of RNSAP protocol         9.2.0           47         RP-100221         1606         Corrections to DC HSUPA         9.2.0           47         RP-100221         1606         Correction of Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100224         1606         Correc	47	RP-100215	1586			9.2.0
47         RP-100201         1688         2         Introduction of HS-PDSCH resources on TS0 for 1.28Mcps TDD         9.2.0           47         RP-100210         1592         2         Rel-9 Flexible cell combinations in DC-HSDPA         9.2.0           47         RP-100230         1593         1         Addition of DGNSS Validity Period in RNSAP         9.2.0           47         RP-100216         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100228         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100216         1596         1         Syncronization detection window configuration in CFLL DCH for 1.28 Mcps TDD         9.2.0           47         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100221         1605         Rapporteur's update of RNSAP protocol         9.2.0           47         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional correction sfor HS-DSCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010				1		
47         RP-100217         1591         3         Correction to state transition of Enhanced CELL_FACH UE for LCR TDD         9.2.0           47         RP-100230         1592         2         Rel-9 Flexible cell combinations in DC-HSDPA         9.2.0           47         RP-100230         1593         1         Addition of DGNSS Validity Period in RNSAP         9.2.0           47         RP-100230         1593         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100216         1597         2         Measurement occasion configuration in CELL_DCH for 1.28 Mcps TDD         9.2.0           47         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100229         1605         Rapporteur's update of RNSAP protocol         9.2.0           47         RP-100221         1606         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional         9.2.0           47         RP-100221         1606         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional         9.2.0           47         RP-100221         1606         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010						
47         RP-100230         1592         2         Rel-9 Flexible cell combinations in DC-HSDPA         9.2.0           47         RP-100223         1593         1         Addition of DGNSS Validity Period in RNSAP         9.2.0           47         RP-100221         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100216         1596         1         Syncronization detection window configuration in CPC for 1.28 Mcps TDD         9.2.0           47         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100221         1605         Rapporteur's update of RNSAP protocol         9.2.0           47         RP-100221         1606         Corrections to DC HSUPA         9.2.0           47         RP-100221         1606         Corrections to DC HSUPA         9.2.0           47         RP-100221         1608         Correction to PL-SOCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100593         1622						
47         RP-100230         1533         1         Addition of DGNSS Validity Period in RNSAP         9.2.0           47         RP-100228         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100218         1596         1         Syncronization indetection window configuration in CPC for 1.28 Mcps TDD         9.2.0           47         RP-100216         1601         Correction for Precoding Weight Set Restriction preference         9.2.0           47         RP-100219         1604         Indication of Precoding Weight Set Restriction preference         9.2.0           47         RP-100221         1606         3         Corrections to DC HSUPA         9.2.0           47         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Corrected a typo in Correction for Drocedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100591         1629         COI rection of Fendaced Serving Cell Change         9.3.0           48         RP-100591         1629         Correction of procedure text for E-DCH SP						
477         RP-100229         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           477         RP-100218         1596         1         Syncronization detection window configuration in CPC for 1.28 Mops TDD         9.2.0           477         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           477         RP-100199         1604         Indication of Precoding Weight Set Restriction preference         9.2.0           477         RP-100224         1605         Rapporteur's update of RNSAP protocol         9.2.0           477         RP-100224         1605         Corrections to DC HSUPA         9.2.0           477         RP-100224         1605         Correction to DC HSUPA         9.2.0           477         RP-100221         1608         Correction of Procedure text memory partitioning for DC HSDPA+MIMO and additional ocrretions to DC HSUPA         9.2.0           024/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100591         1622         Coll Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td></th<>						
477         RP-100218         1596         1         Syncronization detection window configuration in CPC for 1.28 Mcps TDD         9.2.0           477         RP-100230         1597         2         Measurement occasion configuration in CELD, DCH for 1.28 Mcps TDD         9.2.0           477         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100229         1605         Rapporteur's update of RNSAP protocol         9.2.0           47         RP-100221         1606         Corrections to DC HSUPA         9.2.0           47         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.0           47         RP-100221         1608         Corrections for HS-DSCH preconfiguration         9.2.0           47         RP-100521         1608         Correction of procedure text that appears to be duplicated and mis-placed         9.2.1           04/2010         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100591         1622         Correction for S-CPICH for MIMO operation         9.3.0           48         RP-100594         1623         Correction of Procedure text for S-CPICH for M						
477         RP-100230         1597         2         Measurement occasion configuration in CELL_DCH for 1.28Mcps TDD         9.2.0           47         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100229         1605         Rapporteur's update of RNSAP protocol         9.2.0           47         RP-100221         1606         Corrections to DC HSUPA         9.2.0           47         RP-100221         1608         Corrections to DC HSUPA         9.2.0           47         RP-100221         1608         Corrections to DC HSUPA         9.2.0           47         RP-100221         1608         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.3         9.2.3           48         RP-100592         1618         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100593         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100591         1625         Correction for Enhanced Serving Cell Change         9.3.0           48         RP-100901						
47         RP-100216         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           47         RP-100199         1605         Indication of Preceding Weight Set Restriction preference         9.2.0           47         RP-100221         1605         Rapporteur's update of RNSAP protocol         9.2.0           47         RP-100221         1606         3         Corrections to DC HSUPA         9.2.0           47         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100591         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100591         1629         Correction for Change deriving Cell Change         9.3.0           48         RP-100591         1629         Correction for Enhanced Serving Cell Change         9.3.0           48         RP-100591         1633         Corrections to HSDPA secondary serving cell list handling         9.4.0           49         RP-100904 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
47         RP-100199         1604         Indication of Precoding Weight Set Restriction preference         9.2.0           47         RP-100224         1606         3         Correction's update of RNSAP protocol         9.2.0           47         RP-100224         1606         3         Corrections to DC HSUPA         9.2.0           47         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.1           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Corrupted headers fixed         9.2.3           48         RP-100591         1618         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100593         1622         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-100594         1625         Carection when the power offset for S-CPICH for MIMO is zero         9.3.0           48         RP-100591         1623         Corrections to HSDPA secondary serving cell list handling         9.4.0           49         RP-100909         1633         Corrections or feachanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           49         R				2		
47       RP-100229       1605       Rapporteur's update of RNSAP protocol       9.2.0         47       RP-100224       1606       3       Corrections to DC HSUPA       9.2.0         47       RP-100221       1606       3       Corrections to DC HSUPA       9.2.0         47       RP-100221       1608       Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration       9.2.1         04/2010       Corrected a typo in ASN.1 to make it pass the syntax checker       9.2.1         04/2010       Corrupted headers fixed       9.2.3         48       RP-100592       1618       1       CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure       9.3.0         48       RP-100594       1622       Correction of procedure text that appears to be duplicated and mis-placed       9.3.0         48       RP-100594       1629       Correction when the power offset for S-CPICH for MIMO is zero       9.3.0         49       RP-100904       1633       1       Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change       9.4.0         49       RP-100905       1637       Corrections to HSDPA secondary serving cell list handling       9.4.0         49       RP-100905       1637       Corrections of racedure text fo						
47       RP-100224       1606       3       Corrections to DC HSUPA       9.2.0         47       RP-100221       1608       Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration       9.2.0         04/2010       Corrected a typo in ASN.1 to make it pass the syntax checker       9.2.1         04/2010       ToC updated       9.2.2         04/2010       Correction of procedure text that appears to be duplicated and mis-placed       9.3.0         48       RP-100593       1622       Correction of procedure text that appears to be duplicated and mis-placed       9.3.0         48       RP-100593       1622       Correction when the power offset for S-CPICH for MIMO is zero       9.3.0         48       RP-100591       1629       Correction for Enhanced Serving Cell Change       9.3.0         49       RP-100904       1633       1       Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change       9.4.0         49       RP-100905       1637       Correction of procedure text for E-DCH SPS operation       9.4.0         49       RP-100904       1641       Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH       9.4.0         49       RP-100904       1634       Correction of AC-HSDPA       10.0.0						
47         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         ToC updated         9.2.2           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.3           48         RP-100592         1618         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100593         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100591         1629         Correction of Enhanced Serving Cell Change         9.3.0           48         RP-100591         1629         Correction for Enhanced Serving Cell Change         9.3.0           48         RP-100904         1631         Corrections to HSDPA secondary serving cell list handling         9.4.0           49         RP-100904         1633         Correction of procedure text for E-DCH SPS operation         9.4.0           49         RP-100904         1634         Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           49         RP-100904         1635         In				3		
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# History

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